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THEMES IN INDIAN HISTORY

Money and the Market in India 1100–1700

edited by

SANJAY SUBRAHMANYAM

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DELHI
OXFORD UNIVERSITY PRESS
CALCUTTA CHENNAI MUMBAI
1998

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Themes in Indian History

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General Editors' Preface

This series focuses on important themes in Indian history, on those which have long been the subject of interest and debate, or which have acquired importance more recently.

Each volume in the series consists of, first, a detailed Introduction; second, a careful choice of the essays and book-extracts vital to a proper understanding of the theme; and, finally, an Annotated Bibliography.

Using this consistent format, each volume seeks as a whole to critically assess the state of the art on its theme, chart the historiographical shifts that have occurred since the theme emerged, rethink old problems, open up questions which were considered closed, locate the theme within wider historiographical debates, and pose new issues of inquiry by which further work may be made possible.

In India, as in Europe, historical reflections on money and markets are tied to larger debates on the nature of the economy. The writings of the 1960s set out to counter the thesis of an Asiatic Mode of Production and British images of India's village communities. In opposition to these theories of self-sufficient rural India, frozen in time, historians produced evidence of extensive trade, a money economy and credit networks. Subsequent discussions on the limits of the market economy, the expansion and contraction of money in circulation, and cyclical fluctuations in trade, became part of the debate on Indian feudalism. It was argued by some historians that a recession of trade after the sixth century led to a process of de-monetization, de-urbanization, and the de-commercialization and fragmentation of political power: only after the twelfth century was there a revival of trade and markets. This thesis was questioned by other historians, who pointed to the extensive nature of local trade and a continuity in coin production throughout this period.

Discussions of money and markets inevitably led to price studies. Influenced by Hamilton's monetary explanation of the price revolution in Europe, historians of pre-colonial India wrote of a seventeenth-

century price revolution in India. Silver inflow from the New World, it was suggested, led to a price inflation in India and consequent social upheaval. The problems in such an argument were noted by some critics: the inflow of silver from the New World into India was not substantive, nor did all regions of India experience inflation. Other critics went beyond empirical issues to question the theoretical assumptions behind the monetary explanation of price fluctuations.

In discussing money and trade, historians have also reflected on the limits and the specific nature of market forces operating in pre-colonial India. There are studies on 'administered trade', on the political control of prices, on the hierarchy of markets, on the social dimensions of exchange relations, and on the structure of the credit network.

This volume contains most of the important essays on these themes. In the Introduction, Sanjay Subrahmanyam provides a critical review of the literature, while emphasizing the need for more regional studies as well as a theoretically viable framework within which the trade and price histories of India can be charted.

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Introduction

Money is a most wonderful thing.
Without money, one can have no friends.
With money, old men find beautiful young girls.
People give their lives for money;
for money men forsake their wives and families.
There is nothing greater in heaven, earth or hell than money.
So if you give me money, I shall bring you back the moon
or a woman of the highest birth.

—Bharatcandra, *Vidyā-sundara* (c. 1750).[1]

These lines, from the well-known Bengali verse-text *Vidyā-sundara*, of the mid-eighteenth century, were written by a Brahmin poet Bharatcandra Ray at the court of the *zamīndār* Raja Krishnacandra Ray of Krishnagar. They are put in the mouth of one of the characters, the flower-woman Hira (or Malini) of Burdwan, who addresses the prince Sundara from Kanci, and assures him of how money (here *kauḍi*, the cowrie-shell, which has become a generic term for money) can not only buy rice or curds, but can even make a tiger give milk. The eulogy to money, not a little cynical, follows, and calls to mind other similar writings from elsewhere in India in these very years. Thus, the Telugu poet Sarangapani, who poses Vishnu himself as no more than a customer, waiting at the door of a courtesan (whom the poet advises, in no uncertain terms, to 'grab the cash').[2] They speak of a civilization

Acknowledgements: This essay has benefited from discussions over the past decade or so with G. Balachandran, Omkar Goswami, Cemal Kafadar, Sudipto Kaviraj, Ashok Lahiri, Frank Perlin, and David Shulman, and from the comments of Neeladri Bhattacharya. None of them is responsible in any way for the outcome.

[1] Edward C. Dimock, edited and translated, *The Thief of Love: Bengali Tales from Court and Village* (Chicago, 1963), pp. 41–2; the original text may be found in Brajendranath Bandyopadhyay and Sajanikanta Das, ed., *Bharatcandrer granthābali* (Calcutta, 1950). I am grateful to Sudipto Kaviraj for the reference to Bharatcandra, and for going over the Bengali text with me.

[2] Cf. Velcheru Narayana Rao, A.K. Ramanujan and David Shulman, trans., *When God is a Customer* (Delhi: Oxford University Press), forthcoming; the original text may be found in *Sārangapāṇi padamulu*, edited by Sarasvati Nrsimhacaryulu (Madras, 1878). Also see V. Narayana Rao, David Shulman and Sanjay Subrahmanyam, *Symbols of Substance: Court and State in Nayaka-period Tamil Nadu* (Delhi, 1992), pp. 117–18, for an earlier discussion.

which had, already on the eve of the advent of colonialism, an easy familiarity with money, with the market, and an highly ambivalent set of perceptions regarding both of these institutions. Significantly, in Bharatcandra, it is not gold or silver that is praised, but money in its most humble generic manifestation—the cowrie-shell. Equally, whereas two centuries before, in the *Padmāvat* of Malik Muhammad Jayasi, the King Ratanasen who makes a similar sounding eulogy to wealth (*darab*—from the Sanskrit *dravya*) soon receives his come-uppance, no such fate is visited on our eighteenth century characters.[3] Times have changed, and so have moral attitudes!

The present volume is concerned with precisely such changes, in the sphere of money, and the operation of the market in India in the latter half of the medieval period and the early modern epoch—that is to say, in the six or seven centuries leading up to Bharatcandra and Sarangapani. As such, it calls for a series of quite basic and interrelated questions to be addressed by the historian, some of which are as follows. What roles did money and markets play in the polities, economies and societies of medieval and early modern India? Was the reach of money limited to the large urban centres, major overland trade routes, and port-cities, or did monetized transactions have an effect on a rather wider set of social groups than those located in these privileged spaces? Was the coinage of the Indian subcontinent, whose antiquity is testified to by museum collections all over south Asia and elsewhere in the world, servicing a growing body of transactions and needs over the centuries? If it did, what effects did the 'cash-nexus' have on those who entered it? Was it a means by which the state in the region imposed its needs on subject populations, forcing the latter to enter the market in order to realize taxes in money?

These are some of the questions that have plagued historians of south Asia who have occupied themselves in the past decades with the twin issues of commercialization and monetization—production for the market and the use of money—since the beginning of the second millennium AD. It is very nearly a commonplace that these questions cannot be answered in isolation, for the exchange economy does not exist in a vacuum. Pursued in one direction, such questions force us in turn to ask other questions about the nature of production

[3] Mataprasad Gupt, ed., *Padmāvat* (Allahabad, 1973), p. 398; for a rough prose translation based on a slightly different text, see A.G. Shirreff, *Padmavati* (Calcutta, 1944), p. 234. Jayasi was born in 1494, and wrote the work in about 1540, during the reign of Sher Shah Sur.

and its organization. If we approach them from another angle, we find ourselves enmeshed in a discussion of political power and its implications for commercial, and more generally economic, activity. And viewed from the perspective of intellectual history, they lead us to ask: How did those who lived in south Asia in these centuries themselves perceive money and the market? Further, how were their perceptions different from those of the inhabitants of other contemporary societies, whether in Asia or elsewhere?

In this introductory essay, I shall admittedly pose more questions than it is within my power to answer. It may therefore be best to begin with a question which we are in a position to answer: namely what is *money* for our purposes? *Money*, as economists normally define it, is conceived in terms of its functions—as a means of exchange, as an unit of account and as a store of value. From this flows the textbook notion that money itself is sought essentially for two reasons: in order to facilitate exchange (or transactions), and as an asset—since its value relative to other goods in the economy changes over time. In turn, money has a market, and thus a supply and a demand. The conception of the money market hinges crucially on whether what is used as money has an 'intrinsic' value, or whether it is no more than a token or fiat. The former notion, of 'intrinsic' value is in itself problematic, since objects do not have a value outside of a context; as François Simiand has written, 'Money is a social reality'.[4] A piece of gold, or even a piece of bread, on the planet Mars do not necessarily have value, without any social agency that has a use for them. What we mean when we say 'intrinsic' value is therefore quite limited; it merely means that the money is made of a substance that has a value even when it does not take a certain form (say a coin or a note), and that

[4] As cited by Michel Morineau, 'The changing nature of money', in Eddy H.G. van Cauwenberghe, ed., *Money, Coins and Commerce: Essays in the Monetary History of Asia and Europe (from Antiquity to Modern Times)* (Leuven, 1991), p. 200. For early western economists' definitions of and perspectives on money, see Thomas Guggenheim, *Preclassical Monetary Theories* (London, 1989), as also the rather broadranging attempt to contextualize these theories in Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (London, 1974), ch. 6, 'Exchanging', pp. 166–216. For two opposing modern perspectives, see John Hicks, *Critical Essays in Monetary Theory* (Oxford, 1967), and Anna J. Schwartz, *Money in Historical Perspective* (Chicago, 1987). Finally, also see the interdisciplinary study by the anthropologist Thomas Crump, *The Phenomenon of Money* (London, 1981), containing an useful, non-economist's, survey of many of the issues in debate.

this value bears some fairly close relationship to its value as money. Or, to put it slightly differently, there is commodity-money on the one hand, and token-money on the other. Now, since money is conceived of above as possessing a set of properties (or performing a set of functions), it is possible to have near-moneys which perform some but not all the functions of money. Since the asset function of money is a widely dispersed one (for in most societies there are any numbers of stores of wealth), primacy is usually given to money's role in exchange.[5] Thus, to sum the matter up succinctly, the notion of money itself depends crucially on the institution of the market.

The market in turn can be conceived of both abstractly and concretely. If the latter, one is speaking of the marketplace, of hierarchies of markets located in space, and the physical act of exchange in them. Conceived in more abstract terms, the 'market' implies far more: the notion of a careful calculus of loss and gain which underlies the decisions to produce, consume and store, and which permeates the mentalities of individuals and groups in a society; concomitantly, to others, a world lacking somehow in the 'innocence' of pre- or non-market, subsistence-oriented, societies. Indian languages abound in proverbs that confirm the latter stereotype, such as the Tamil saying 'The money from the sale of a dog does not bark' (*nāy virra kācu kulaikkātu*), which implies that money is amoral, and the means by which it is obtained irrelevant. It has sometimes been claimed that money is profoundly egalitarian as a consequence, and respects no forms of hierarchy other than those which it creates itself.[6] These are ideas which we shall have occasion to investigate in the course of this introductory essay.

[5] This is not to neglect the role of 'moneys-of-account'. For an instructive discussion on this problem, see F.C. Lane and R.C. Mueller, *Money and Banking in Medieval and Renaissance Venice, vol. I: Coins and Moneys of Account* (Baltimore, 1985).

[6] On such issues, see the articles collected in Jonathan Parry and Maurice Bloch, eds., *Money and the Morality of Exchange* (Cambridge, 1989), especially the editors' introduction, pp. 1–32. As an example of the thesis that money 'complicates the moral order, turning what was formerly black and white into greyness', they cite Alan Macfarlane, 'The Root of All Evil', in D. Parkin, ed., *The Anthropology of Evil* (Oxford, 1985). A more subtle and complex version of the same argument may be found in Georg Simmel, *The Philosophy of Money* (London, 1978).

COMMERCIALIZATION—NATURAL, ARTIFICIAL AND FORCED

Views on the emergence of the market—thus, commercialization—have taken several forms since the late eighteenth century. One argument, which may be associated with Adam Smith and those who have followed him (including most recently Milton Friedman and the 'Chicago school' of economists), would suggest that the 'propensity to truck, barter and exchange' is an innate human urge, and that thus the market is a natural phenomena which emerges so long as this urge is not fettered.[7] From this would flow the next stage in the argument: that a number of ideologies, and institutions, over history have been designed to impede the market. Mercantilist institutions which impose the state's control over economic activity, and lead to the phenomenon of administered trade, are a typical example. Monopolies created using state power would be another such impediment. Overall, then, the brunt of this argument—in normative terms—is that the market and trade should ideally be limited by the nature of technology, and that other institutional barriers should be swept away. Formulated in the late eighteenth century, this perspective carries the characteristic flavour of the European enlightenment, seeing the market as both progressive and inevitable in character. But it has been unfashionable for the most part in the Indian context, and it is only recently that a synthetic economic history of India, from antiquity to the present day, has adopted such a perspective.[8]

In contrast to the perspective summarized above, are others, which argue that the market is itself a product of historical circumstances. It is useful, however, to distinguish between several variants within this broad position. A particularly influential version in some circles, due to substantivist anthropologists like Karl Polanyi, argues that market-less trade was historically characteristic of most societies, where prices did not in fact fluctuate freely.[9] Rather, rates of exchange between

[7] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed., Edwin Cannan, 2 vols (London, 1904); in the same spirit is John Hicks, *A Theory of Economic History* (Oxford, 1969).

[8] Deepak Lal, *The Hindu Equilibrium: Cultural Stability and Economic Stagnation, India, c. 1500 BC-AD 1980* (Oxford, 1988). Cf. also my review of the book in *The Journal of Development Economics*, vol. XXXIII, 1990, pp. 399–403.

[9] Karl Polanyi, *et al.*, *Trade and Markets in Early Empires: Economies in History and Theory* (New Haven, 1957); also Polanyi, *The Great Transformation* (London, 1944). These issues are also touched on in Sanjay Subrahmanyam, 'Introduction', in Subrahmanyam, ed., *Merchants, Markets and the State in Early*

objects were fixed by custom, and enforced equally by customary sanction; exchange took place through the twin modes of 'reciprocity' and 'redistribution'. Since the market did not exist in the modern sense, even the objects that were exchanged were not really 'commodities', for they were not produced with the market in mind. Producing units, be they families or larger entities, acted largely with a view to maintaining subsistence under the principle that Polanyi termed 'householding'. These elements defined for him the situation in western Europe as late as the sixteenth century. Thus, in Polanyi's own words:

> Broadly, the proposition holds that all economic systems known to us up to the end of feudalism in Western Europe were organized either on the principles of reciprocity or redistribution, or householding, or some combination of the three. These principles were institutionalized with the help of a social organization which, *inter alia*, made use of the patterns of symmetry, centricity and autarchy. In this framework, the orderly production and distribution of goods was secured through a great variety of individual motives disciplined by general principles of behavior. Among these motives, *gain was not prominent* [emphasis added].[10]

The market thus emerged in this view not because of some inbuilt psychological urge of which humans partake, but rather because it facilitated a certain set of relatively impersonal social relations. And yet, the transition to the market was not an easy one—hardly a smooth process by which the market mentality was diffused little by little. Rather, Polanyi in his first major work, *The Great Transformation* cited above, argued that the final emergence of the self-regulating market in England required a wrenching metamorphosis in the late eighteenth and early nineteenth centuries, a crisis in social relations, wherein the state intervened to prop up the market. Once this moment of transformation had been weathered, the state could afford to step aside, and the market could act autonomously, regulating itself and determining prices in such a way that the economy was no longer 'embedded in society'. Instead, there emerged 'nothing less than the institutional separation of society into an economic and political sphere', and the creation of a market society which was remarkable for its 'extreme artificiality'. We could thus scarcely be farther away from the Smithian notion of the market as a natural and logical outgrowth of basic human psychological characteristics.

Modern India (Delhi, 1990), pp. 1–13.

[10] Polanyi, *The Great Transformation*, pp. 54–5.

This point of view may be juxtaposed with the historicist perspectives, both Marxian and Weberian, which argue for a more differentiated set of stages in the period before the market emerges as an autonomous institution, rather than positing—as Polanyi does—a more-or-less straightforward binary distinction between pre-market and market situations. Nevertheless, parallels between some Marxian arguments and those of Polanyi and his followers are striking—even if they are often denied in Marxist historiography. The notions of the market under capitalism as self-regulating, and price-making, are hardly alien to some of Marx's own writings. Polanyi himself, in his early arguments, was evidently highly influenced by Marx's account of the emergence of capitalism in Britain. However, some modern Marxists have sought to distance themselves from the position that views the market as 'self-regulating', seeing it as too 'Smithian' in character. In this newer view, political relations (and power more generally) may be thought to impinge directly on the market, even in its modern form. Rather than attacking the illusory 'freedom' of the market—as traditional Marxists have by terming it a freedom based on choice within an already established framework of property rights—it is now often argued that even in capitalist society, the economy remains embedded within society. No 'laws of motion' determine the working of the economy (as orthodox Marxists have posed the matter, using the metaphors of Classical Mechanics), but instead power, politics and social relations impinge on the ostensibly economic in manifold ways.

These then are the features of the historiography on the market in general as a phenomenon, based largely—though not exclusively—on the European historical experience. Where India in the period from 1100 to 1700 is concerned, the dominant perspective—while ostensibly Marxist in nature—has certain peculiar features to it. Since the society is, for writers in a Marxist vein, a pre-capitalist one, it follows that the sphere of the market must have been limited and also heavily circumscribed by political and social factors. The idea of the self-sufficient village (or at least locality), adumbrated by Marx himself in his writings on India, also is usually surreptitiously defended even if the explicit notion of the 'Asiatic Mode of Production' has been dispensed with. At the same time, the facts of international and long-distance internal trade, production of both agricultural goods and manufactures for trade, extensive coinage and importation of precious metals, all have to be explained. It has been conventional in this context to use as the explanatory framework one originally developed to

portray the impact of colonialism on India—the 'forced commercialization' hypothesis. In the context of colonial India, this hypothesis was used to argue that commercialization was forced on the peasantry by a variety of means—some subtle and some more explicitly coercive in nature. An older 'moral economy'—an economy underpinned by a set of mutually reinforcing and relatively ideal customs, say *jajmāni*—was thus replaced by the market. The impact of the colonial state was felt in terms of heavy revenue demand, coerced production of certain crops, and the spread of railways; it was mediated in its effects on the producer by mercantile capital—the ubiquitous *sāhukār* and *mahājan*. The peasant thus went willy-nilly to the market, to enter into a bottomless pit of indebtedness and dependence.

However, whereas earlier writers had posed these developments exclusively in the post-1750 period, historians such as Irfan Habib in his *The Agrarian System of Mughal India [1556–1707]* (1963), relocated these processes already in the pre-colonial period. There were however some distinctions between the colonial and pre-colonial incarnations of 'forced commercialization'. For example, in the latter, the role of mercantile capital in peasant immiserization was by no means so explicit as in the former. Nevertheless, in this view, money was the agent of the market and thus indirectly responsible for peasant impoverishment. Without money, strict limits are set to trade, which must then take the form of barter. The introduction of money into a system and its growing use (monetization), was thus a counterpart, but not an exact corollary, of commercialization. Since money has usually been historically associated with the state, which more often than not attempts to control its production and circulation, the view that money like the market was an agent of state power tended to gain credence.

Let us consider a characteristic example of such a formulation, from the authoritative *Cambridge Economic History of India*, vol. I. It appears in a chapter by one of the editors, Tapan Raychaudhuri, writing on inland trade in Mughal India. He asserts:

> The economy of Mughal India was marked by a curious paradox. Almost certainly, the great majority of their people mainly consumed what they produced or secured from the neighbours on the basis of customary arrangements. It is equally certain, that virtually everyone was involved in exchange as producer or consumer, usually both. Again, as some 50 per cent of the agricultural produce was given as revenue—paid in or eventually converted into cash—and presumably the tax burden on the artisan was comparable, in

a predominantly subsistence-oriented economy an incredibly high proportion of the produce was meant for exchange. The paradox is thus explained by the massive extraction of revenue, a job in which the Mughals probably succeeded better than all their predecessors. The range and volume of exchange were correspondingly greater. The producer who surrendered some 50 per cent of his gross produce could have very limited scope for buying anything.[11]

The reader of this passage will not have failed to note certain internal contradictions therein. If 'the producer' (who, like 'the artisan' elsewhere in the same passage, has imperceptibly become an undifferentiated category!) did indeed 'have very limited scope for buying anything', how could 'virtually everyone' be *both* a producer and a consumer on the market? No less puzzling is another question, namely of how a peasant economy has been able to reproduce itself in India over so many centuries, despite the fact that all the while the peasantry was constantly being immiserized. Logically, some periods must surely have contributed to raise the levels of peasant welfare to a point that immiserization could be viable once more thereafter. Here, another passage in the *Cambridge Economic History of India* on the Mughal period, this one by Irfan Habib, sums up the dilemma.

The fiscal burden thus rested more heavily on the small cultivator, and must, therefore, have tended to intensify the already existing differentiation among the rural population. The collection in cash would still further increase such differentiation. Those who had sufficient resources to raise cash crops would find it easier to pay the revenue upon selling the produce than those smaller peasants who grew the coarse foodgrains which at best had only a local market. But the intensification of differentiation inherent in the Mughal revenue system was countered by yet another factor. Since taxation tended to be raised to the total surplus, the demand for revenue was bound to exceed it in some localities at one time or the other. In such circumstances, it was not only the lower strata that felt the brunt of the burden of taxation; the upper strata were also ruined. Thus, inherent in the Mughal revenue system was a tendency also to subvert superior cultivation, while it simultaneously increased the distance between the rich and the poor in the countryside.[12]

In this passage, we find, with some variation, similar internal contradictions to those that may be encountered in Raychaudhuri's account

11 Tapan Raychaudhuri, 'Inland Trade', in Tapan Raychaudhuri and Irfan Habib, eds., *The Cambridge Economic History of India*, vol. I, 1982, p. 358.

12 Irfan Habib, 'Agrarian Relations and Land Revenue: North India', in Raychaudhuri and Habib, eds., *Cambridge Economic History*, I, p. 240.

as well: on the one hand, the desire to maintain that some 'rich' peasants did exist, on the other the urge to assert that contact with the market through the means of forced commercialization and state intervention uniformly ruined all strata, and left the peasantry bereft of the entire surplus. There are some who would defend this, arguing that (in the terms defined by Teodor Shanin in his studies of the Russian peasantry) both centripetal and centrifugal forces might be at work.[13] This is in fact a specious defence. For what Habib asserts here is not merely that some forces at work tended to promote differentiation and others levelling: rather, he wishes us to believe that the state drew 'the total surplus' of *all* peasants, but that there were still rich and poor peasants. Now, unless one defines subsistence differently for different households, it is hard to see how some peasant households bereft of their surplus were richer or poorer than others—*also* bereft of their surplus and reduced to subsistence. This can only be the case if the notion of surplus in use is one of investible surplus, rather than surplus over subsistence—which then allows us to posit households with very different levels of consumption (some 'rich' and others 'poor'). But that does not appear to be the case in the arguments reproduced here—and in any event the data for the period hardly permit us to distinguish the expenditure of households on consumption as opposed to their accumulated surplus. The problem may be seen therefore as resting squarely in the inability to resolve a tension: between the portrayal of the state as the omnipotent consumer of the entire surplus, and the desire to see the peasantry not as a single class but as differentiated. Logically, one of these assumptions must yield to the other—and it would seem clear that the notion of the state as taking the 'total surplus' is where the argument's weakness lies.

A further variant of 'forced commercialization' merits at least some brief mention here. In our discussion so far, we have focused principally on the notion of forced *sale* by producers, in order to meet the revenue requirements of state, expressed in cash. One also encounters on occasion the idea of forced *purchase*, wherein the state (or state officials) oblige subjects to purchase commodities at an inflated price. This is usually the case when the state collects taxes in commodities rather than cash, and the principal victims of the arrangements are seen to be merchants—on whom the state imposes the

13 Teodor Shanin, *The Awkward Class: Political Sociology of Peasantry in a Developing Society—Russia, 1910–1925* (London, 1972).

obligation to buy. Such an argument has been made for eastern Rajasthan in the eighteenth century, for example. A different portrayal has been presented in the case of the eastern Deccan, a century earlier, where it is argued that state officials (here belonging to the Golconda Sultanate) routinely forced grain on non-agriculturists at inflated prices. This arrangement, known as *guddem*, may be interpreted as a sort of concealed tax on artisanal activity.[14] We may note however that the implications of forced purchase and forced sale are not quite the same—the former having an impact largely on traders and artisans, and the latter on agricultural producers. Nevertheless, they do share one attribute in common—namely an emphasis on the conjunction of state power and the market, and a view of the latter as a tool of the former rather than a neutral (or positive) agent.

Money and Early Medieval State Formation

Commercialization, the spread of the market and of market-activity, and monetization, the growing use of money, are often assumed to have gone together historically. Up to a point such a connection can be made, for barter, or other forms of moneyless exchange, have their limits. It is however unwise to insist on a linear association of the two phenomena. Just as the use and spread of money, usually testified to by numismatic evidence, are seen as signs of the growth of the cash-nexus, and a more *commercially* oriented economy, the proposition is also often assumed to hold in inverse. Thus, the disappearance of money (or of coins from a particular period from coin-hoards) is often taken as evidence of a widespread restructuring in the nature of larger economic and even political relations. A characteristic example of this sort of hypothesis is the so-called 'Indian Feudalism' thesis, put forward by R.S. Sharma in a well-known work about a quarter-century ago.[15] He argued that a number of factors both within India and in the

[14] Joseph J. Brennig, 'The textile trade of late seventeenth-century northern Coromandel: A study of a pre-modern Asian export industry', Ph.D. dissertation (Madison: University of Wisconsin, 1975), pp. 196–212; also see Madhavi Bajekal, 'The state and the rural grain market in eighteenth century eastern Rajasthan', in Sanjay Subrahmanyam, ed., *Merchants, Markets and the State*, pp. 90–120, especially pp. 109–113, for a discussion of *parṇa*—a form of forced sale.

[15] R.S. Sharma, *Indian Feudalism, c. 300–1200* (Calcutta, 1965); for a variation, B.N.S. Yadava, *Society and Culture in Northern India* (Allahabad, 1973).

larger global (or at least Eurasian) arena had led to the fragmentation and localization of power, accompanied by a process of de-monetization, and recession of commercial forces. After the Gupta dynasty in north India (4th–6th centuries), attempts at political consolidation proved ephemeral. Despite a brief resurgence under Harsha in the seventh century, there followed—it was argued—a four century long period of 'endemic warfare', accompanied by de-urbanization, the decline of trade routes, and a proliferation of local 'feudal' rights.[16] Of course, some towns and urban centres did continue to exist and even perhaps flourish, but the overall balance is seen as leading in the direction of a tradeless, moneyless economy of fragmented localities, wherein land itself is the major currency of power. It thus followed from this that the establishment of the Delhi Sultanate in the twelfth century, and its expansion under Iltutmish and his successors in the thirteenth century saw a revival of trade, monetization and commercialization, and also the creation of a wholly different political system. So long as Islam was kept at bay, in Sind, and on the western fringes of the subcontinent, it apparently impeded the flow of trade and bullion into India. Once Islam was established in northern India, and India became a part of the larger continuum of Muslim states, this process was apparently reversed. At least until the fourteenth century, a new monetary system, based on the silver and gold *ṭaṅkas*, and the smaller *dehliwālas* is believed to have held sway, and to have permitted a brisk trade between towns, and also to have facilitated the drain of agricultural surplus towards the towns from the countryside.

This thesis, of which the barest sketch has been presented above, has been challenged from various perspectives. First, it has been argued, notably by B.D. Chattopadhyaya, that a great deal more evidence exists for local trade, and the resurgence of a commercial economy based on small and medium-sized trading centres at the turn of

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For reiterations of Sharma's hypotheses and a dismissal of critics, R.S. Sharma, *Perspectives in Social and Economic History of Early India* (New Delhi, 1983), and Sharma, *Urban Decay in India (c. 300–c. 1000)* (New Delhi, 1987); in the latter study, ch. 5, pp. 84–107, the hypotheses of decline of trade, de-urbanization, and feudalization are extended even into south India. For a sample of the debate that this has generated, see T.J. Byres and H. Mukhia, eds., *Feudalism and Non-European Societies* (London, 1985), in particular the papers by R.S. Sharma, Harbans Mukhia, Irfan Habib and Burton Stein.

16 Simon Digby, 'Economic Conditions before 1200', in Raychaudhuri and Habib, eds., *Cambridge Economic History*, I, pp. 45–7.

the first millennium, than has hitherto been believed.[17] More tenuously, André Wink has tried to argue that the establishment of Islam in Sind and the persistence of maritime contacts between the heartland of the Islamic world and India should be read as evidence of a growth in external trade.[18] Given the fragmentary nature of his own evidence, the case for growth can by no means be taken as demonstrated; the evidence of Chattopadhyaya is certainly far more convincing for internal, overland, commerce. Wink's polemical position, which rests on comparing the Sharma thesis with the 'Pirenne thesis' in European history (where the rise of Islam was associated once more with the decline of trade in the Mediterranean), also does not serve to further his argument or strengthen the case he wishes to make. If references to the European model cannot prove the case for 'feudalism', nor can mentions of contrary hypotheses in the European case be used against it!

Since a good part of the 'Indian Feudalism' literature rests on the assumption of de-monetization, the status of money at the close of the first millennium is obviously a point worthy of close examination. Not surprisingly, therefore, the single most important contribution in recent times to a furthering of our understanding of the economic history of the period is the work of a numismatist, namely John Deyell's *Living Without Silver*. Deyell, writing with an eye to the economic and social dimensions of the study of coins, has in a minutely-documented study presented the following picture. First, taking the period from roughly AD 750 to AD 1000, and focusing on northern India, he argues that there were in these centuries at least four major regional currencies: (i) the billon (mixed silver and copper) *drammas* of the Gurjara-Pratiharas; (ii) a system combining local copper and silver coins with imported issues under the Arab governors of Sind; (iii) the bimetallic coinage of the Turk and Hindushahi dynasties in Afghanistan; and (iv) copper coinage in Kashmir. The coins produced

[17] B.D. Chattopadhyaya, 'Trade and urban centres in early medieval India', *The Indian Historical Review*, 1–2, 1974, pp. 203–19.

[18] André Wink, *Al-Hind: The Making of the Indo-Islamic World, vol. I (Early medieval India and the expansion of Islam, seventh to eleventh centuries)* (Leiden/Delhi, 1990), pp. 219–24. Of course, as writers on the 're-feudalization' of eastern Europe after 1500 have argued, the growth of external trade and agrarian feudalism are by no means incompatible. For a variation on this theme in the Indian context, see M.R. Tarafdar, 'Trade and Society in early medieval Bengal', *The Indian Historical Review*, vol. IV, (2), 1978, pp. 274–86.

by these systems were however marked by a specific feature: the anonymity of the issuing authority. In this, they were a strong contrast both to the earlier Guptas and the later Sultans of Delhi. Deyell concludes therefore that 'although coins before AD 1000 were stereotyped in design and bore little political or chronological information, they were manufactured continuously in large quantities'.[19]

The two centuries after AD 1000, dominated in north India by a set of Rajput dynasties and in the north-west by Turkish monarchies (like the Yaminids of Punjab and Ghazna), see some changes in the economic and monetary spheres. Deyell surveys the main political units—the Yaminids, the kingdoms of eastern and central India (including Kanauj and Bayana), western India (and especially Gujarat), Malwa, the Tomar and Chauhan dynasties of northern India—and concludes that 'the pattern of currency usage in the eleventh and twelfth centuries in northern India was qualitatively different to that in the ninth and tenth centuries'. A major difference was that the Rajput dynasties usually did not issue anonymous coinage. Three major coinages appear to have dominated the period: the *gaḍhaiya dramma* coins of western India, gold coins (of what he terms the 'Lakshmi type'), and bull and horseman billon coins. The latter two were usually issued in the name of a ruler, even if the *gaḍhaiya* was not. In turn, three zones sprang up, corresponding to the areas of circulation of these three coinage types. It is of some interest to note that the *gaḍhaiya* nevertheless emerged as a significant medium of international exchange, and appears to have circulated in Sind, Rajasthan, Maharashtra and the Konkan.

The thrust of Deyell's argument is to emphasize therefore the relatively continuous character of trade in many of the major regions of north India in the epoch. Where the central Gangetic valley is concerned, for example, he argues that the nature of the river system permitted heavy mercantile traffic to pass with exchange nodes at fairly distant intervals, so that long-distance trade could be 'in virtual isolation from the countryside through which it passed'. Purely local money forms, such as the Pratihara billon *dramma* and, after AD 1000, the 'Lakshmi-type' coins of Rajput states, circulated through the whole central Gangetic valley, but were not used as a medium for inter-regional exchange for the most part. On the other hand, we have the

[19] John Deyell, *Living Without Silver: The Monetary History of Early Medieval North India* (Delhi, 1990), p. 66.

case of the Gujarat currency cited earlier, which was not only widely circulated but also imitated, and used as a means of exchange over quite a substantial circuit.

Equally significant are his conclusions on the question of monetization. He writes:

> Under-monetization, in the sense it is used in the discussion of feudal exchange modes, does not refer to a physical shortage of coins. It does not mean that goods went unsold or bargains unmade for lack of a monetary medium of exchange. Rather it refers to an intentional circumscription of the use of money. This would involve the supplanting of money as an exchange medium by other non-monetized usages. These might include barter, payment of taxes in kind, or exchange of services for mutual benefit as prescribed by tradition or custom.[20]

But none of these appears to have taken place in northern India in the centuries under consideration, at least not on a widespread scale. Rather, what was taking place was a periodic shortage of precious metals, relative to their demand, leading in turn to the debasement of coinage. It thus appears to be quite clear after Deyell's analysis that market exchange in north India did not necessarily suffer, nor did the region lapse into a tradeless, moneyless, condition.

The issue is rendered still more complex if one takes the diversity of regional evidence into account. Protagonists of 'feudalism' usually concentrate on three areas in the late years of the first millennium: the western Deccan under the Rashtrakutas, Bengal under the Palas, and the north-west under the Pratiharas. Further south, under the Colas, there has rarely been any attempt to portray a process of ruralization, 'feudalization' or the cessation of trade and exchange, as being the rule in the tenth, eleventh or twelfth centuries. Debates continue on the extent of state centralization, but there is little doubt that this was a period of resurgent urbanism, accompanied by an expansion in networks of external trade towards southeast Asia and Sri Lanka. This trade, often associated in turn with a set of so-called 'merchant guilds' (*maṇigrāmam*, *aiññurruvar*, etc.), also extended inland, linking the Tamil country with the Deccan, and the east (Coromandel) coast with the Malabar region.[21]

[20] Ibid., p. 244.

[21] See for example, K.A. Nilakantha Sastri, *South India and Southeast Asia: Studies in their History and Culture*, reprint (Mysore, 1978); Kenneth R. Hall, *Trade and Statecraft in the Age of the Colas* (New Delhi, 1980); Meera Abraham, *Two Medieval Merchant Guilds of South India* (New Delhi, 1988).

A particularly interesting feature of coinage in south India, already in this early period, is its substantial dependence on gold and copper, with silver being relegated for the most part to a tertiary role. Even the Yadavas of Devagiri, who ruled over a kingdom founded in the late twelfth century, and were located much to the north of the Colas, produced very largely gold coinage, especially the *padma tanka*.[22] We do not have clear evidence of the gold-silver ratio in the south in this period, but it is likely to have been somewhat higher than the ratio of 1:10 reported for Delhi in the early thirteenth century. Again, we do not know what the effects on this ratio were of the substantial transfers of bullion as tribute to north India in the course of the late thirteenth and fourteenth centuries. A particular puzzling feature of north Indian monetary history is the fact, however, that despite the substantial transfers of treasure—with thousands of kilos of gold and silver from Devagiri alone, in the reign of 'Ala al-Din Khalji [r. 1296–1316], besides substantial amounts from Madurai and other centres in the Deccan and farther south—north India entered once more into a period of monetary 'famine' in the fourteenth century, while the south did not.[23] Historians differ on when this 'famine' began, some placing it after the reign of Muhammad Shah Tughluq [r. 1325–51], others already in his period. The testimony of Yahya bin Ahmad Sirhindi's *Tārīkh-i Mubārakshāhī*, among several other texts, leads one to infer the existence of a shortage in Muhammad Shah's epoch. Thus, he writes of the 1330s as a moment of crisis, particularly evoking the celebrated moment when the Sultan resorted to the use of token copper money.

> Owing to the bestowal of abundant presents and rewards upon the people, the Exchequer was bereft of money. All the sources of income and means of import were closed. The copper *tankas* were issued as tokens, and their value was enhanced to twenty-five times; they became current on an equal footing with the *tanka-i hāl*: any one who showed reluctance to receive it used to be punished severely. In collusion with one another, the Hindus and the evil seekers established a mint in every village, struck copper coins, sent them to the city, and received in exchange gold, silver, horses, arms and precious articles. It was for this reason that the contumacious gained in strength.[24]

So far the account follows a commonsense view of the working of

[22] Deyell, *Living Without Silver*, pp. 227–29.

[23] Simon Digby, 'Northern India under the Sultanate: The currency system', in Raychaudhuri and Habib, eds., *Cambridge Economic History*, I, pp. 96–97.

[24] Yahiya bin Ahmad bin 'Abdullah Sirhindi, *Tārīkh-i-Mubārakshāhī*, translated K.K. Basu (Baroda, 1932), pp. 104–5.

Gresham's Law: the bad money (the token coinage) driving out the good. But the following passage develops the theme in a more interesting fashion:

> Some time after, the people of the far-off countries refused to accept the copper tokens, and one gold coin rose to the value of fifty or sixty copper coins. Owing to the cheapness of the copper tokens, His Majesty, perforce, called in that currency and proclaimed that whoever possessed copper coins should bring them to the treasury and receive gold coins in exchange. The people profited greatly by this arrangement and they became wealthy. Gold was drained out of the treasury, and the copper tokens were rejected. For a long time, they remained lying in heaps in the palace of Tughluqabad.

The logic of Yahya's argument here is thus that one cannot maintain an island of token coinage in an international trading environment, over which the Sultan's writ does not run (or where his credibility was questionable). Its more straightforward implication would be of a gold (and silver) shortage of some dimensions in the mid-fourteenth century, concerning which some writers are sceptical. Simon Digby has asserted, for example, that 'it is clear from the scale of Muhammad bin Tughluq's subsequent military operations, from the plentiful gold coins issued later in his reign and accounts of his largesse to foreign visitors . . . that the accumulated treasure of the Delhi Sultanate was not exhausted'; others have argued that the numismatic evidence does indeed support the hypothesis of a precious metal shortage.[25]

On the other hand, where the fifteenth century is concerned, there is near unanimity on the issue of 'de-monetization', accompanied once more in many portrayals by a sort of 're-feudalization' under the Afghan Sultans of Delhi.[26] But one historian has spoken out against this portrayal: this is J.F. Richards in a relatively little-known article published in 1965 (and included in the present collection). Richards argued there that unlike what was usually believed, 'normal trade

[25] Digby, 'Northern India under the Sultanate: The currency system', p. 97; in contrast see Shireen Moosvi, 'Numismatic evidence and the economic history of the Delhi Sultanate', *Proceedings of the Indian History Congress, 50th Session, Gorakhpur* (Delhi, 1991), pp. 207–18.

[26] W.H. Moreland, *The Agrarian System of Moslem India* (Cambridge, 1929), pp. 68–9; Irfan Habib, 'Northern India under the Sultanate: Agrarian Economy', in Raychaudhuri and Habib, eds., *Cambridge Economic History*, I, p. 67. Also see a more recent look at numismatic evidence by Najaf Haider, 'The Lodi Coinage—Some questions', *Proceedings of the Indian History Congress, 50th Session*, pp. 229–35.

continued in the fifteenth century as it always had in north India'. The monetary shortage that many contemporaries claimed affected the economy, was he stated largely restricted to the *state*; society in general did not feel the lack of availability of currency. If the Lodi Sultans debased the coinage, it reflected their inability to gather together bullion, rather than a generalized shortage. This argument was however implicitly denied by Irfan Habib, who continued to hold the view that the fact that taxes were collected in kind under the Lodis reflected 'a worldwide shortage of silver [and] a continuous fall in prices [that] had been taking place for a long time'. But once more, the contrast with southern India and Bengal are marked. In the latter case, John Deyell has argued (in a paper also included in this collection) that metal inflows into Bengal in the fifteenth century continued to be sufficient so that, even if sporadic, they maintained the volume of currency. In the case of south India, the testimony of a number of travellers to the Malabar coast and the kingdom of Vijayanagara leaves no room for doubt. Let us take the *Maṭla' al-Sa'dain wa Majma al-Bahrain* of Kamal al-Din 'Abd al-Razzaq Samarqandi, ambassador of Mirza Shahrukh of Samarqand in the 1440s. In a prominent part of the city of Vijayanagara, he locates the mint and describes it as follows.

> On the left of the palace there is the mint, where they stamp three kinds of gold coins, mixed with alloy. One is called *varāha* and weighs about one *misqal*, equal to two *kopāki dinars*. The second kind is called *fanam*, and is equal to the tenth of the *partāb*. The last is the most current. Of pure silver they make a coin equal to the sixth of a *fanam*, which they call *tār*, which is also in great use. The third of a *tār* is a copper coin called *jital*. The usage of the country is that, at a stated period, every one throughout the whole empire carries to the mint the revenue (*zar*) which is due from him, and whoever has money due to him from the Exchequer receives an order upon the mint.[27]

He thus describes clearly enough the five major units in the system: the *varāha* (or *honnu*, the *pagoda* as later Europeans were to call it), its half the *pratāpa*, its twentieth part the *paṇam*, the relatively less-used silver *tāra*, and the copper coin *jital* (evidently derived from the terminology of the Delhi Sultanate, and corresponding to the Tamil

27 'Abd al-Razzaq, *Matla' al-Sa'dain*, in H.M. Elliot and J. Dowson, eds., *The History of India as Told by its Own Historians (The Muhammadan Period)*, 8 volumes, 1867–77, vol. IV, p. 109.

kācu).[28] There is neither here nor in any other account the slightest reference to shortage of coinage in circulation, or to a contraction of the money-economy.

Hierarchy versus Money?

By the mid-sixteenth century, even north India appears relatively well-supplied with coin, and with the rule of Sher Shah Sur, the first elements of a system centering around the silver *rupiyā* are put in place. Thus, there emerged what has been termed a 'tri-metallic system' of currency under the Mughals, based on coinage in gold, silver and copper, but in reality dominated by the early seventeenth century by silver. The Spanish colonization of the Americas, and the re-integration of China and Japan into the trading world of the Indian Ocean in the latter half of the sixteenth century were important factors that had a bearing on this process. The growing production of precious metals in the New World and the Far East had a significant impact on its supply in the Indian subcontinent. New World silver found its way to India via the Cape route, but also in relatively substantial quantities through west Asia. This facilitated the growing dominance of the silver *rupiyā*, which gradually replaced the billon *sikandarī*, and was a coin of high purity, weighing 178 grains troy, save in the case of certain exceptional, larger, issues. For some specific purposes, essentially ceremonial and for hoarding treasure, there was also the gold *muhr* or *ashrafī*, of around 169 grains troy. Finally, for the maintenance of revenue accounts as indeed for small transactions, the copper coin the *dām* (officially rated in the late sixteenth century at one-fortieth of a *rupiyā*), took the place of earlier issues, but in turn gave way to other coins like the *paisā*.[29] It has sometimes been claimed that copper money was less and less in use in the course of the seventeenth century, but there is some reason to treat this view with scepticism.

The Mughals had thus by the seventeenth century established a

[28] R.S. Panchamukhi, 'The coinage of the Vijayanagara dynasties', in *Vijayanagara Sexcentenary Commemoration Volume* (Dharwar, 1936), pp. 101–17.

[29] Irfan Habib, 'Monetary System and Prices', in Raychaudhuri and Habib, eds., *The Cambridge Economic History*, vol. I; Habib, 'A System of Trimetallism in the age of the "Price Revolution" ', in J.F. Richards, ed., *The Imperial Monetary System of Mughal India* (Delhi, 1987).

currency system with the appearance of a great deal of uniformity, and in which foreign coins (like the silver *lārīs* and *reales de a ocho*, which commonly served as currency in the ports of the western Indian Ocean) were not allowed to circulate. In their insistence that foreign coins be melted down and re-minted before use, they present an apparent contrast to the states of southern India, where mints were routinely farmed out, and little control was kept over the quality and uniformity of production. They also contrast with their rivals, the Ottomans, who allowed *reales* to circulate through their realm, with little or no hindrance. Clearly, the Mughals set a great deal of store by coinage as a symbol of sovereignty, and the messages that they inscribed on the coins too are an interesting testimony to shifts in official ideology from epoch to epoch. Again, when the Mughals expanded into the Deccan, the advance of the *rupiyā* became a measure of the spreading shadow of their sovereignty. In Golconda, from the 1630s, they insisted on the coining of a tributary version of the *rupiyā*, in which the *peshkash* from the Sultans of Golconda would be transmitted.[30] But it is only in the eighteenth century that the *rupiyā* truly makes inroads into the Deccan and the south, which until then preferred to remain largely on a bimetallic (gold-copper) system.[31] There was one other conspicuous exception to the rule of Mughal imperialism by coinage. This was in Gujarat, where well into the seventeenth century, a set of tributary chiefs continued to coin silver *mahmūdīs*, which remained important as a currency for local transactions, with the *rupiyā* being used more for long-distance payments and revenue remittances.

To all evidences then, money concretely meant a good deal in the Mughal domains. And yet, it has been claimed by some recent historians that the very notion of money in the abstract remained somehow alien to the Mughals, and was viewed by them with some suspicion if not outright hostility. As Peter Hardy expresses the matter:

> The peoples of the Mughal empire were so greatly and minutely divided by sensibility, by differences of caste, creed, that is, by ethnic and ethical background, that the solidarity groups into which they saw themselves divided

30 J.J. Brennig, 'The Golconda Rupee of Shahjahan: A Mughal Tributary Coinage', *Journal of the Andhra Historical Society*, 1979; S.H. Hodivala, 'The Golconda Rupee of Shahjahan', *Journal of the Asiatic Society of Bengal*, (N.S.), vol. XII, 1917 (Supplement).

31 H.H. Dodwell, 'The substitution of silver for gold in south India', *The Indian Journal of Economics*, vol. III, 1920–22, pp. 183–204.

were unable of themselves to perform all the functions necessary for survival —child-rearing, production, exchange and protection. They needed an outside power with the ability and the standing to regulate their relationships in a rational fashion: a power which, if not one bound by rule, was at least directed by a steady purpose, that of achieving universal peace. The power of money could not do this: it, most likely, would have been seen to put power into the hands of the alien and the unworthy. Only that entity which moderns call 'the state', and which Mughals called, *inter alia*, *pādśāhī* could supply stability and honour. Dimly, the writers examined were perhaps aware of this, and in placing hierarchical above monetary exchanges were offering an appropriate ideology for Mughal rule.[32]

The texts that he consulted en route to arriving at such a conclusion included 'Abd al-Qadir Badauni's *Najāt al-Rashīd*, several writings of Shaikh Abu'l Fazl, Muhammad Baqir Khan, Hamid al-Din Khan, and Shah Wali-Allah Dehlawi, mostly from the sixteenth, seventeenth and early eighteenth centuries. Hardy's idea is that a principle of social hierarchy underwritten by the state was seen as a *substitute* for another sort of social arrangement, dominated by money and exchange. Albeit obscurely, what he appears to be groping towards is a notion of why the market-mentality did not take root in India until 1700, and presents the explanation in ideological terms, counterpoising in a Polanyi-esque mode 'the power of money' to not only the state but 'hierarchical exchanges'. To Hardy then, the fear of money and the market (which would strengthen the hand of the 'alien and unworthy') pushed Mughal subjects in the direction of supporting not only the state, but the social *status quo* (here glossed as 'universal peace'). But was it not possible for Mughal subjects to seek an ideology which rejected *both* the market principle, and hierarchical social ordering, or alternatively to accept both in some form without any perceived contradiction?

The picture that emerges from a reading of the literature in fact permits a more differentiated stance than that allowed by Hardy's portrayal. An examination of Islamic literature from west Asia at the end of the first millennium suggests the coexistence there already of two opposed strands. The one view, represented by writers like Al-Jahiz, 'in praise of merchants', assures us that 'Muslims know that Exalted God's elect, His most sincere worshipper, the one entrusted with His revelation, was a member of a merchant house'—a reference

32 Peter Hardy, 'The Mughals and Money', in Christopher Shackle, ed., *Urdu and Muslim South Asia: Studies in Honour of Ralph Russell* (Delhi, 1991), pp. 19–27.

to the Prophet Muhammad's own trader origins, as well as those of his principal wife. Other writers in Arabic, like Al-Tawhidi, are however equally firm in stating that 'Concerning merchants, the gaining of pence sets up an obstacle between them and manly virtue and interposes a barrier for them from all that is connected with chivalrous qualities'.[33] This ambiguity may be found carried over into Sufic writings in India as well, for all their apparently 'egalitarian' drive. The letters of the celebrated Firdausi Sufi, Sharaf al-Din Yahya Maneri (1290–1381) of Bihar, are marked for instance by a certain reluctance to engage with trade, money and worldly affairs. In one of them, he admits that 'even some of the companions of the Prophet engaged in trade, such as Usman and Abdul Rahman ibn Auf', but this is offset by a far stronger tendency of which an example is quoted below:

> Understand that there are three degrees in the world. First, there is the measure of necessity in food, clothing, and dwelling. More than that is the measure of felt need or what is convenient. After that is the measure of adornment or articles of luxury. This allows no limit. There are those who have reduced their needs to the bare minimum and seek only that; and those who fall into luxurious living, and end up by falling headlong into the nethermost hell, which has no end.
>
> [Verse:]
> You cannot have the goods of both this world and religion!
> When deprived of the former, you cannot acquire the latter![34]

The Sufi's ideology, even if a levelling one, thus carries him towards a moral position wherein both money and the market must be kept highly circumscribed, rather than allowed play in social (hence, moral) spaces. Or consider the fifteenth century north Indian saint, Kabir, also the bearer of considerable Sufic influences, and usually regarded as the furthest possible voice from the status-quoist medieval perspective cited by Hardy—and as represented by men like Badauni. It is scarcely the case that Kabir's anti-normative notions led him to emphasize the virtues of money as a real leveller, or the market as the true test. Rather, he harps often, and indeed in a rather predictable vein, on the ills that money produces, as we see below.

[33] As cited in R.B. Serjeant, 'Yemeni Merchants and Trade in Yemen, 13th-16th Centuries', in Denys Lombard and Jean Aubin, eds., *Marchands et hommes d'affaires asiatiques dans l'Océan Indien et la Mer de Chine, 13e-20e siècles* (Paris, 1988), p. 61.

[34] Paul Jackson, trans., *Letters from Maneri—Sufi Saint of Medieval India* (New Delhi, 1990), pp. 285, 307.

Gold, silk, horses, women,
a lot of wealth,
lasts a little time.
From a little money
a man goes crazy.
He doesn't hear news
of the King of Death.
When the terror comes,
his face shrivels.
Cheated, he learns
his nectar was poison (*Ramaini*, 21).[35]

Here, the philosophical underpinnings are simple enough: money and wealth are illusory, and hence not to be hankered after. The statement is not directed at accumulation in a large sense, but at consumption—even 'a little money'. Elsewhere, Kabir uses the market as a metaphor for the sort of place where unworthy seekers after spiritual benefits clamour and mill, in an unsuccessful attempt to attain what is beyond their grasp. Thus,

Where buyers swarm, I'm not;
where I am, there's no buyer.
Without awareness they wander,
plucking at shadows
of the word (*Sakhi*, 289).[36]

Other verses find him adopting formulae rather like those of Maneri cited above, referring to greed as a harlot, or as 'a violent fire, that never abates'. One may naturally enough see direct parallels between this sort of opposition to money, money-mindedness, and the market, and the European literature of roughly the same period; in the European case, the roots of such an opposition are often traced to Aristotle, after whom it was revived much later via the central work of Thomas Aquinas, the succeeding 'schoolmen', and other thinkers associated with the church or religious orders like the Franciscans. And yet,

35 *The Bijak of Kabir*, translated by Linda Hess and Shukdev Singh (Delhi, 1986), p. 82. For a general study of Kabir, see Charlotte Vaudeville, *A Weaver Named Kabir* (Delhi, 1993), which is a revised version of the same author's *Kabir*, vol. I (Oxford, 1974). We cannot enter here into the vexed question of the 'authenticity' of these verses from the point of view of textual tradition. For our purposes, it is significant enough that such verses are part of the received corpus of Kabir.

36 *Bijak*, pp. 123–4.

historians of Europe normally do not seek to pose the ideological resistance to money and the market in that context as necessarily being a defence of the hierarchical principle in social ordering. Indeed, it is even argued at times that it is only when money becomes significant that a concerted opposition to it grows, and it comes to be depicted pictorially in medieval European manuscripts as 'filthy and disgusting waste defecated by demons and apes'.[37]

The question is rendered even more complex in the medieval Indian case, for we find a certain ambivalence even within the corpus attributed to Kabir himself. Thus, while on the one hand maintaining the positions that we have quoted above, he is equally capable of declaring elsewhere:

> My Lord is like a merchant,
> easily He goes on trading:
> Without balances and scales,
> He weighs the whole world.
>
> All there is comes from the Lord,
> nothing from the servant:
> He makes a mustard seed a mountain
> and the mountain a mustard seed.
>
> O Lord, without Thee,
> I am not worth a single cowrie:
> But if Thou, the Rich, art with me,
> I would fetch tens of thousands![38]

Another verse is perhaps even more to our purpose in terms of its choice of metaphor—gold, used as a paragon of purity and goodness. Thus Kabir once more:

> The Lord has revealed himself
> To me within my body;
> My entire being, cleansed,
> Now shines like pure gold.
> Just as the goldsmith assays
> Gold on the touchstone,
> I have been out to the test
> And made whole.

[37] Jonathan Parry, 'On the moral perils of exchange', in Parry and Bloch, eds., *Money and the Morality of Exchange*, p. 78.

[38] Vaudeville, *Kabir*, vol. I, p. 197.

The same set of verses concludes after narrating how, over several rebirths, the process of purification was achieved:

> Without knowing Him
> I was base metal;
> On realising Him
> Kabir became gold,
> Precious and pure.[39]

These latter verses seem to parallel rather closely the texts revered in what is usually recognized to be a more commercially-minded, and market-oriented ethos of the early modern period, that of the Sikhs, whose *Granth Sāhib* (in fact a compendium of various poets and saints, including Kabir) often uses commercial metaphors for spiritual activities in a more-or-less positive vein. This is not entirely surprising in one sense, for the early Sikh Gurus were largely drawn from Khatri stock, and were thus trained to be traders, accountants, book-keepers, *munshīs*, and the like. Thus:

> The true Guru is the merchant:
> the devotees are his pedlars.
> The capital-stock is the Lord's Name and
> to enshrine the truth is to keep its account.[40]

Virtue in general here is transformed at the level of metaphor in terms of the virtues of doing good business: let the capital increase, and keep the customer's account honestly. Or again, in a similar vein,

> I sowed the seed of the Lord's Name in the farm
> and I dealt only in the service of the Guru.
> Peace and poise filled all the shops (in the town),
> and the traders and the Merchant-Lord abided in the same place.
> There is no punitive tax on goods nor a levy,
> for, the goods (are the Lord's own) and are
> stamped by the eternal Lord Himself.[41]

[39] This verse may be found translated in V.K. Sethi, *Kabir: The Weaver of God's Name* (New Delhi, 1984), pp. 286–7.

[40] *Sri Guru Granth Sahib*, translated Gopal Singh (Delhi, 1960–62), vol. II, p. 427, as cited in Chetan Singh, *Region and Empire: Panjab in the 17th Century* (Delhi, 1991), p. 260.

[41] *Granth Sahib*, II, pp. 426–7, as cited in Singh, *Region and Empire*, p. 287. For a useful discussion of such literature from the point of view of economic and social history, see W.H. McLeod, 'Trade and investment in sixteenth and seventeenth century Punjab: The testimony of the Sikh devotional literature', in Harbans Singh and N. Gerald Barrier, eds., *Punjab Past and Present: Essays in Honour*

Here then is God as Merchant and collector of stamp-tax, indeed a sort of glorified revenue-farmer! We have an appreciation here, in an oblique vein, of the market, and once more in a back-handed manner, an acknowledgement of the legitimacy of trade, which is somewhat different from Kabir's rather mixed view of money, trade, and profit. The reconciliation between the values of merchant and trader, and the values of 'other-worldly' spirituality is effected elsewhere in the literature of the epoch too, for instance in Jan Gopal's *Dādū janma līlā*, an exemplary life of the sixteenth century western Indian saint and mystic Dadu Dayal (1544–1603), written in about 1620. The mystic himself, in an apocryphal conversation with the Mughal Akbar at Fatehpur Sikri, delivers familiar homilies about the need to give up gold and women (*kanak kāmnī*) and rejects presents of not only gold and silver (*sonau rūpau*), but whole villages and districts, horses and elephants (*gāñv parganā ghoṛe hāthī*). And yet, later in the same text, once Dadu has left Sikri for the west, a merchant or *saudāgar* fearing shipwreck offers a half of his goods to God in Dadu's name if saved, and finds his terms acceptable! Or again, seven hundred merchants (*sāhs*) carrying seven crores worth of goods find themselves immobilized in a calm on the ocean; however, taking the Name helps their ship move on again.[42]

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of Dr Ganda Singh (Patiala, 1976), pp. 81–91. For an interesting parallel discussion from Gujarat, see Françoise Mallison, 'Saint Sudāmā of Gujarat: Should the Holy be Wealthy?', *Journal of the Oriental Institute* (Baroda), vol. XXIX, nos 1–2, 1979, pp. 90–9, which traces the evolution of Sudama's image from the *Bhagavata Purāṇa* through Narasimha Maheta's *Sudāmā caritra* (fifteenth century) and finally to the *Sudāmā caritra* of Premananda (1675–91). In each successive stage, wealth, money and the market seem to feature larger and larger in Sudama's preoccupations (in one version he even trades his old wife in for a younger one, as a consequence of divine grace).

[42] *The Hindi Biography of Dadu Dayal*, ed. and trans. Winand M. Callewaert (Delhi, 1988), VII.21–23, and VIII.21–23. The translations in this book are somewhat free, and I have hence checked and modified them against the original text, which is also reproduced, in ibid., pp. 103, 106. For Dadu more generally, see W.G. Orr, *A Sixteenth-century Indian Mystic* (London, 1947). It is significant that a mid-seventeenth century Persian text, the *Dabistān-i maẓāhib*, possibly written by Mir Zulfiqar 'Ali al-Husayni Mubad Shah, writes of Dadu that 'he prohibited his followers to worship idols, to eat the flesh of any animal or to hurt any living being; but he did not order them to abandon woman and wife or to withdraw from all business of the world; but he left it free to anyone to give up or to cultivate the connection and the intercourse with men'. See D. Shea and A. Troyer, eds. and trans., *Dabistān-i maẓāhib*, 3 vols (Oriental Translation Fund) (Paris, 1843),

These texts are without doubt both important and neglected sources that do indirectly provide a contemporary understanding of what money, commerce, and the market meant in ethico-moral terms to the subcontinent's inhabitants in the medieval and early modern centuries—in ways somewhat more nuanced than those suggested by Peter Hardy. One does not find money or the market posed in opposition to hierarchical modes of social ordering, but rather in a more ambiguous relation. On the other hand, the materials that we have discussed above carry their own peculiarities and limitations. They are, to begin with, largely (even if not exclusively) metaphorical rather than literal in their dealings with these themes. Aside from providing us a sense of what the 'profit-motive' might or might not have meant, and at times even suggesting that the market is not necessarily an unfair or illegitimate mode of human dealing, these particular texts do not provide us reflections of an abstract nature on money and the market, as can be found in contemporary writings elsewhere in Europe as well as Asia (for instance fifteenth century Vietnam, Tokugawa Japan, or the Ottoman Empire).[43]

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vol. II, p. 233. It is also worth noting that a late-sixteenth century hagiographical text concerning a much earlier saint Namdev (died *c.* 1350), namely Anantadas's *Nāmdev ki parcāi* (1588) also uses mercantile metaphors (measurement of faith on a scale) in a striking way; cf. *The Hindi Padavali of Nāmdev*, ed. and trans. Winand M. Callewaert and Mukund Lath (Delhi, 1989), pp. 41–4, 49–54. Though ostensibly aimed at showing that wealth (*darab*) is useless, the text winds up providing a remarkable instance of how mercantile usage and metaphors had penetrated other contexts.

[43] On medieval Europe, see for example, L. Little, *Religious Poverty and the Profit Economy in Medieval Europe* (London, 1978). For monetary thinking in fifteenth century Vietnam, see the brief discussion in Esta S. Ungar, 'Vietnamese Leadership and Order: Dai Viet under the Le dynasty (1428–1459)', Ph.D. dissertation, Cornell University, 1983, which mentions a treatise on money by the minister Nguyen Trai. On China, see Robert M. Hartwell, 'Classical Chinese monetary analysis and economic policy in T'ang-Northern Sung China', *Transactions of the International Conference of Orientalists in Japan*, vol. XIII, 1968. For Japanese economic thought in the Tokugawa period, see the general survey by Tessa Morris-Suzuki, *The History of Japanese Economic Thought* (New York, 1989), and for a relatively early Japanese economic thinker, see Herman Ooms, *Charismatic Bureaucrat: A Political Biography of Matsudaira Sadanobu, 1758–1829* (Chicago, 1975). On the Ottoman empire, see for example Cemal Kafadar, 'Les troubles monétaires de la fin du XVI siècle et la prise de conscience ottomane du déclin', *Annales ESC*, March-April 1991, no. 2, pp. 381–400, especially pp. 390–6, as also the more extended discussion in Cemal Kafadar, 'When Coins turned into Drops of Dew and Bankers became Robbers of Shadows: The boun-

A few examples of writings from the sixteenth or early seventeenth century that are more comparable with the contemporary Ottoman materials may be found in the Persian literature of northern India and the Deccan, but these have not been subjected to rigorous analysis. In this category, one could place such writings as the *Risāla-yi faẓl-i kasb*, of the Chishti Sufi Abu Salih Muhammad, probably composed in the late sixteenth century and comprising formulations on the utility of work and trade; also worthy of closer study is a poetic text composed in early seventeenth century Bijapur by the celebrated Nur al-Din Muhammad Zuhuri, entitled *Mīnā-bāzār*, and made up of a description, at once fanciful and concrete, of a market in the time of Sultan Ibrahim 'Adil Shah II of Bijapur.[44] Another particularly significant text that has been little analysed from this point of view is the Arabic *Hujjat-Allāh al-Bāligha*, written in the 1730s by the celebrated Naqshbandi Sufi Shah Walī-Allah Dehlawi (1703–62), and containing his reflections on the division of labour, usury, taxation, agriculture, urban life and a number of other phenomena. Any detailed analysis of medieval and early modern economic thought in India would have to take texts such as these into consideration, for even if at times they do little more than repeat received wisdom, they nevertheless often represent a shift in terms of both emphasis and conceptualization from earlier, medieval Islamic, writings.[45]

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daries of Ottoman economic imagination in the sixteenth century', Ph.D. dissertation (Montreal: McGill University, 1986). Also see the much earlier, rather more conventional, discussion in Halil Inalcik, 'The Ottoman economic mind and aspects of the Ottoman economy', in M.A. Cook, ed., *Studies in the Economic History of the Middle East from the Rise of Islam to the Present Day* (London, 1970), p. 207–18. These latter works are interesting as contributions to the history of mentalities; as economic history, they can only be read with strong reservations (for which also see note 73 below).

[44] On the Chishti text, see the brief description in W. Ivanow, *Concise Descriptive Catalogue of the Persian Manuscripts in the Collection of the Asiatic Society of Bengal*, reprint (Calcutta, 1985), p. 608; several manuscripts exist of Zuhuri's *Mīnā-bāzār*, as also one edition of the Nawalkishore Press, AH 1284. I am grateful to Nalini Delvoye for bringing Zuhuri's work to my notice.

[45] I am grateful to Muzaffar Alam for pointing out the importance of this text to me. A brief summary and discussion of it may be found in S.A.A. Rizvi, *Shāh Walī-Allāh and his Times: A Study of Eighteenth-century Islam, Politics and Society in India* (Canberra, 1980), ch. 6, 'The political and social thoughts of Shah Wali-Allah', especially pp. 309–315; also see J.M.S. Baljon, *Religion and Thought of Shāh Walī Allāh Dihlāwi 1703–1762* (Leiden, 1986). Also see Kafadar, 'Les troubles monétaires', pp. 390–95, for a discussion of some relevant Arabic

Money and Mobility

The role of money in these centuries can also be addressed from a somewhat different perspective than that which we have adopted in the preceding section. This is the perspective of normative texts, produced in the courts, which see money (if not the market) as entering into the ambit of statecraft. An example is the twelfth century treatise of the Western Chalukya ruler Bhulokamalla Someshvara, titled the *Mānasollāsa*, comprising some eight thousand couplets, divided into five sections (*vimshatis*), each with around twenty chapters. Of these, the second section is of particular interest, dealing with the 'ways and means of making the position of the king secure'. Here, we find a discussion of the different officers of the state, the nature of taxes that can be imposed (including an ideal of one-sixth of produce as a ceiling), and then a long disquisition on the management of elephants. Horses are mentioned too, but given lesser importance. In all of this, where is the treasury and money? The management of the treasure (as distinct from the treasury) finds mention, with suitably sententious advice on its preservation (*rajatasya suvarṇasya ratnanām rakshayet khanim*). More curiously, gold and silver (*svarṇam raupyam*) enter into a chapter on alchemy (*dhātuvāda*), where it is suggested that alchemic means be used to supplement the revenues available to the treasury by making them from copper.[46]

This sort of normative text finds a distant echo, over four centuries later, in what is surely the most celebrated medieval Indian text on statecraft, the *Ā'īn-i Akbarī* of Shaikh Abu'l Fazl (1551–1602). In the absence of a proper intellectual biography of the Shaikh, it is difficult to ascertain the philosophical roots of many of his constructions. But quite early in the text, which forms a part of the larger chronicle, the *Akbar Nāma*, he enters into a brief, and quite penetrating, discussion of money as a prelude to a description of the imperial mint. To Abu'l Fazl, as the passage below demonstrates, money was a necessity as a means of exchange, but also as a store of value.

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texts from Mamluk Egypt, such as Ibn al-Ukhuwwa's *Ma'ālim al qurba fī aḥkām al-ḥisba* and Maqrizi's *Shuẓūr al-'Uqūd fī Ẓikr al-Nuqūd*, the latter translated into Turkish, with an exegesis, in about 1600 by Kemaluddin Mehmed Efendi.

46 *Mānasollāsa of King Bhulokamalla Somesvara*, vol. I, ed. G.K. Shrigondekar (Baroda, 1967), pp. 59, 61.

The inhabitants of the towns and the country perform their transactions by means of money. Every man uses it according to the extent of his necessities; the man whose heart is free from worldly desires sustains by it his life, and the worldly man considers it the final stage of his objects—the wants of all are satisfied by it. The wise man looks upon it as the foundation, from which the fulfilment of his worldly and religious wishes flows. It is absolutely necessary for the continuance of the human race, as men obtain by money their food and clothing . . . Moreover, money is required, as our furniture and utensils break; they last in no case very long. But money does last long, on account of the strength and compactness of its material, and even a little of it may produce much. It enables men to travel. How difficult would it be to carry provisions for several days, let alone for several months or a year![47]

It is curious, besides, that he sees the money as limited neither to urban areas (thus, 'the inhabitants of the towns and the country'), nor to any particular group—and instead as the domain of the 'human race'. But, like so many other thinkers of the epoch, both in Asia and in Europe, he tended to confuse 'money' the abstract construct, with gold. A further passage hence runs:

By the help of God's goodness this excellent precious metal [gold] has come to the shore of existence, and filled the store of life without much labour on the part of man. By means of gold, man carries out noble plans, and even performs Divine worship in a proper manner. Gold has many valuable qualities: it possesses softness, a good taste, and smell . . . To render it service, God has allowed silver and brass to come into use, thus creating additional means for the welfare of man. Hence just kings and energetic rulers have paid much attention to these metals, and erected mints, where their properties may be thoroughly studied.

There is some hyperbole here (for instance in referring to the 'good taste' of gold), and also some playful dissimulation, in implying that mints are really there as laboratories rather than to produce coins! It is also quite typical that Abu'l Fazl implies that gold is the metal of the greatest importance, and silver and copper (brass?) of lesser sig-

[47] Abu'l Fazl 'Allami, *The Ā'īn-i-Akbarī*, vol. I, translated H. Blochmann, ed. D.C. Phillott, reprint (Delhi, 1989), pp. 16–17. Abu'l Fazl ability to combine the abstract and the concrete here may be contrasted not merely to texts like the *Mānasollāsa*, but to earlier, eminently practical, texts, such as the *Dravya-parīksha*, written in Apabhramsa around 1318 by Thakkura Pheru, mintmaster under the Khaljis and Tughluqs. For a discussion of this text, see Deyell, *Living Without Silver*, pp. 253–63, and for a translation of the text itself, V.S. Agrawala, 'Dravya Pariksha of Thakkura Pheru', *Indian Numismatic Chronicle*, vol. VII, (1/2), 1969, pp. 100–114.

nificance. In fact, in the Mughal territories, the gold *muhr* was scarcely used as a current coin for exchange at all, with transactions tending instead to be in terms of silver *rupiyās*, and copper *dāms* and *paisās*. Abu'l Fazl's remarks on money are not restricted to this alone. Elsewhere, in the *Akbar Nāma*, he also briefly discusses the system of bills of exchange (*huṇḍīs*) in Hindustan, marvelling at its wonderful qualities.[48] Yet, he does not see the bill of exchange as being a near-money or a substitute for money, on account of his rather literal orientation towards precious metals, so characteristic of the period.

Nevertheless, the bill-of-exchange, known both by the local term *huṇḍī* and the Arabic *ṣufta*, had existed in India well before the Mughals, even if we cannot trace its exact roots. Travellers from west Asia in the time of the Sultanate at times compared the bill-of-exchange as it obtained there with its Indian counterpart, and sought to locate the bill in the context of the functioning of a variety of banking agencies, usually related in turn to the business of money changing. The term often used for the individuals who engaged in these activities over a good deal of western and northern India by the sixteenth century was the Arabic *ṣarrāf*, from which the more recent 'shroff' arose; but those who dealt in *huṇḍīs* were also often designated by the term *khwastadār* (financier), and still more commonly as *mahājan*. It was the *ṣarrāfs* who were responsible for the movement of money using *huṇḍīs*, and their services were hence made use of by a variety of individuals and institutions, ranging from the Mughal state itself, to individual *jāgīrdārs*, and even European traders and trading companies. Now the *huṇḍī* as a term could be used in more than one meaning. In the *Ardhakathānaka* of Banarasidas, a seventeenth century autobiography, in verse, of a Jain merchant, it is used on at least two occasions in the sense of a promissory note. Once, when Banarasidas wished to buy cloth but had no money, he states that he 'wrote a *huṇḍī*' for five hundred rupees (*huṇḍī likhi, rajat sae pañc*). On the other occasion, a promissory note that his father had given was called by the debtor; here he speaks of how the '*huṇḍī* arrived' (*huṇḍī āī dīnae dām*), producing the misleading image that it might in fact have been a bill of exchange.[49] Similarly, the term *ṣufta* too was not free

[48] *The Akbar Nama of Abu-l-Fazl*, translated H. Beveridge, vol. III, reprint (Delhi, 1989), p. 1139.

[49] *Ardhakathānaka, Half a Tale*, ed. and trans. Mukund Lath (Jaipur, 1981), Verses 316 and 494; see also the discussion in Ramesh Chandra Sharma, 'Aspects of Business in Northern India in the Seventeenth Century', in Satish Chandra,

of ambiguity, and could be used for earnest-money, as much as for a bill.

Besides its occasional use in the sense of a promissory note, the *huṇḍī* (or *hinduī*) was most often the term employed in common parlance for a bill, as has been shown by Irfan Habib in a careful study. Habib cites the *Khulāsat ut-Tawārīkh* of Sujan Rai Bhandari, written in the late seventeenth century, which offers the following description.

> If, because of the dangers on the routes, a person cannot convey sums of money to a near or distant place, the *ṣarrāfs* take it from him, and give him a piece of paper written in the Hindvi characters, without a seal or envelope, addressed to their agents, who have their shops in the various towns and places throughout these lands; and this paper in the language of this country is known as *huṇḍī*. The *gumāshtās* of these honest dealers pay out the money in accordance with that document, without any argument or objection, though the distance may be two hundred leagues, and so they keep their dealings straight.[50]

The manner in which the *huṇḍī* worked then was as follows. Bankers, often themselves money-changers as well, would take on the responsibility of transferring funds from one centre to another for a party. There would normally be a charge for the facility, which would vary depending on the route over which the transfer was made and the precise manner of the transfer. Broadly speaking, two modes existed. The first was to draw money from a *ṣarrāf* against a promise to pay him in another town when the *huṇḍī* was produced there. The alternative was to pay money down, with a promise from the *sarrāf* that

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ed., *Essays in Medieval Indian Economic History* (New Delhi, 1987), pp. 222–8.

[50] Sujan Rai Bhandari, *Khulāsat ut-Tawārīkh*, ed. Zafar Hasan (Delhi, 1918), p. 25, as cited in Irfan Habib, 'The system of bills of exchange (*huṇḍīs*) in the Mughal Empire', in Chandra, ed., *Essays in Medieval Indian Economic History*, p. 208. This is a revised version of an earlier paper by the same author, 'Banking in Mughal India', *Contributions to Indian Economic History*, vol. I, 1960. An additional, so far neglected, source of data on *huṇḍīs* are the records of Armenian traders operating in India; see in this context Kéram Kévonian, 'Marchands arméniens au XVIIe siècle: A propos d'un livre arménien publié à Amsterdam en 1699', *Cahiers du monde russe et soviétique*, vol. XVI, (2), 1975, pp. 199–244, and Michel Aghassian and Kéram Kévonian, 'Le reseau marchand arménien: Autonomie d'ensemble et intégration locale', forthcoming in a volume edited by Michel Morineau and Sushil Chaudhury. Some additional data drawn from English Company sources is presented in an otherwise unremarkable work by B.S. Mallick, *Money, Banking and Trade in Mughal India* (Jaipur, 1991).

the money would be recovered in the other town, once the *huṇḍī* was produced. In the former case, the *ṣarrāfs*' charges were higher than in the latter, since first, the risk devolved now more on him, and second because there was a time element (and hence an implicit loan) involved. The person who drew the money had use of it for a period of time while the *huṇḍī* 'matured' or was delivered. In the case of certain *huṇḍīs*, they did not necessarily have to be cashed on 'sight' (*naẓar*), and a grace period (often of sixty-one days) was permitted. Here, the loan aspect became that much stronger.[51]

Rates that were charged for transfers are quite crucial pieces of evidence, showing what the *normal* directions of flows, by way of trade, were. In abstract terms, we may conceive of the system as follows, for the moment suppressing the issue of multilateral transactions. Two centres, say Surat and Burhanpur, would have a certain normal flow of goods between them. The difference in the commodity balance would, in the absence of other means, be met through physical transfers of cash specie. Where revenue transfers were involved in the equation, as between Surat and Agra, they too would have to be taken into consideration in drawing up the balance. Once the balance had been arrived at, the basic direction of the flow of cash specie would have been established. Now imagine that a private party wished to transfer money in the same direction as the cash specie flow. This would imply that on his account, that much additional specie would notionally have to be transferred. Since moving specie involved a cost in terms of providing an escort, and in terms of the inherent risk involved, he would be charged for it. On the other hand, an individual who wished to move funds against the direction of the net specie flow was actually aiding the system, by reducing the net quantity of specie that physically had to be moved. To this extent, he would be 're-warded', in the sense that he would earn a premium on his money. Thus, those who wished to move money against the tide of net normal flows of cash specie would be at an advantage. For example, to receive Rs 100 in Ahmadabad, one needed to pay more than Rs 100 (say Rs 106 or 107) in the Deccan town of Burhanpur because net specie flows were in the direction Burhanpur-Ahmadabad. Again, in general, as Habib observes, 'remittances from the ports to places inland, therefore, always involved loss by exchange for the remitters (and a correspond-

51 Cf. Om Prakash, 'Sarrafs, Financial Intermediation and Credit Network in Mughal India', in van Cauwenberghe, ed., *Money, Coins and Commerce*, pp. 473–90.

ing gain for the drawers)'.[52] Thus, moving money from Agra to Surat involved a profit on exchange since it was *against* the tide, while moving money from Surat to Agra involved a loss since it was *with* the general direction of specie movement.

The two aspects that we have considered so far, of the *ṣarrāfs'* charges and the exchange rate, combined to produce the total discount rate on *huṇḍīs*. The two could either be added up, as when we speak of transfers from ports to the inland (or *with* the tide), or the charges could be subtracted from the exchange, if the latter were favourable. But *huṇḍī* transactions could become far more complex than this. This resulted from the fact that a sort of resale market existed in *huṇḍīs*, which did not have to be cashed by the parties initially involved in their issual. Between the mid-sixteenth century and the eighteenth century, the pattern of use of these grew more and more complex, the networks too both proliferated and grew dense, and major transfers now became possible not only within a region (such as western India) or between the port and the inland administrative city, but two regions as distant as Gujarat and Bengal. This situation was described in the mid-eighteenth century by Muhammad 'Ali Khan in his *Mirāṭ-i Aḥmadī*, as one where instead of collecting cash, the possessor of the *huṇḍī* could give it to one of his own debtors and 'so free himself from that obligation'. Not only this: 'Similarly, he may transfer it to another, until it reaches a person against whom the drawee of the *huṇḍī* has claims, and who therefore, surrendering to the latter, relieves himself of his debt. But cash is not used throughout'.[53]

If we accept this description as bearing at least some resemblance to reality, what we observe is that by the eighteenth century, *huṇḍīs* had become a near-money, which was exchanged against cash specie at a certain rate (termed *anṭh*), which depended in turn on the availability of cash specie. This rate could go up or down, at times reaching as much as 8 per cent, a rate that would normally serve as a great discouragement to those who wished to cash the *huṇḍī*. And yet *huṇḍīs* were not quite money, for while serving as a medium of exchange, it is not very clear that they were either stores of value, or used for accounting purposes. Nevertheless, to the extent that they facilitated exchange, they supplemented coinage in this function, and should hence make us wary of accepting any simplistic relationship

[52] Habib, 'The system of bills of exchange', p. 211.

[53] As cited in ibid., p. 216; also see Habib, 'Monetary System and Prices', pp. 361–3.

between coinage in circulation and the general price level. The situation is also rendered somewhat piquant if we bear in mind that in some areas, both within the Mughal empire and outside it, *ṣarrāfs* had a close hold over minting, thus controlling on the one hand the availability of cash, and on the other the circulation of *huṇḍīs*. This was the case for example in Surat in some periods of the seventeenth century.[54]

The role of *huṇḍīs* has been much debated in the literature on the early modern period. Some historians, like J.F. Richards, have sought to deny their significance in the seventeenth century, arguing that the state at least largely moved its funds by physically transferring cash specie under escort.[55] The evidence of Habib and more recently H.W. van Santen calls this into question. Already in 1599, Habib notes how a sum of Rs 300,000 was moved by *huṇḍī* from the Mughal treasury to a campaigning army in the Deccan. Again, in the 1620s, a Mughal noble transferred a sum of the same dimensions from Patna to Agra by means of *huṇḍīs*, while in the mid-seventeenth century the Golconda tribute of Rs 1,000,000 was transferred from Hyderabad to Aurangabad by the same method.[56] Nevertheless, Richards is probably right to suggest that the use of the *huṇḍī* grew in importance over the period. Evidence from the eighteenth century shows that in addition to transfers between large towns such as Surat, Ahmadabad, Agra and Patna, *mahājan* capital could transfer huge sums by bills even across far smaller centres. Documents in Gujarati and Rajasthani testify to this phenomenon for western India; the activities of the Pune bankers in this respect are also well known. Again, in the Gangetic valley, there are clear indications of elaborate networks linking even small towns, and permitting the transfers of funds between revenue-farmers and their principals, as also between traders located in different *qasba*-centres.

The Structure and Evolution of Markets

Our focus so far has largely been on money, banking, and the financial

[54] Om Prakash, 'On coinage in Mughal India', *The Indian Economic and Social History Review*, vol. XXV, 4, 1988, pp. 475–91.

[55] J.F. Richards, 'Mughal state finance and the pre-modern world economy', *Comparative Studies in Society and History*, vol. XXIII, (2), 1981, pp. 285–308.

[56] Habib, 'The system of bills of exchange', p. 218.

aspect of economic transactions in the medieval and early modern period. But to leave matters at that would be to tell only a fraction of the story, for money cannot be seen without a larger network of exchange. It has become usual in recent times for historians the world over to view the matter spatially, and to see the market in terms of the relationship between production organized spatially, and consumption, which too is located in concrete terms. The legacy of writings on early modern economies other than India for Indian historians is quite strong here, particularly in the case of G. William Skinner's important work on the structure of periodic marketing in China, and other writings on Europe, west Asia and Japan, by a number of other scholars following him.[57] In the essays that are included in the present volume, the Skinnerian tradition is variously used by scholars for their own purposes. Thus, Kenneth Hall in his study of the Colas in Tamil Nadu, argued that the physical unit the *nāḍu*, which was identified as a result of Y. Subbarayalu's careful studies of the political geography of the Cola region, should be identified with a central marketplace or *nagaram*, where exchange transactions were centralized.[58] The *nagaram* was linked on the one hand to smaller marketing centres, and on the other hand to port-towns and administrative centres, to form a sort of hierarchy of marketplaces, very much in the spirit of Skinner. This identification became possible because of the plethora of inscriptions that exist in the Tamil countryside from this period, and suggests a precociously sophisticated economic network at work.

Hall's purpose however was not to argue that a price-making market system existed in southern India already by the early years of the second millennium. Rather, he suggested that the trade carried out within this framework was still 'administered' in character, and did not result in freely fluctuating prices of products. Following in the footsteps of Karl Polanyi, he saw the entire system of trade, as well as of trading guilds, as reflective of a more or less substantivist social and economic organization. In terms of empirical interpretation, he

[57] G. William Skinner, 'Marketing and social structure in rural China', *The Journal of Asian Studies*, vol. XXIV, 1964–5 (in 3 parts); Gilbert Rozman, *Urban Networks in Ch'ing China and Tokugawa Japan* (Princeton, 1973); Suraiya Faroqhi, 'Sixteenth-century periodic markets in various Anatolian Sancaks', *Journal of the Economic and Social History of the Orient*, vol. XXII, 1, 1979, pp. 32–80.

[58] Y. Subbarayalu, *Political Geography of the Chola Country* (Madras, 1970); for a more recent consideration, see E. James Heitzman, 'Gifts of Power: Temples, Politics and the Economy in Medieval South India', Ph.D. dissertation, University of Pennsylvania, 1985.

thus also made use of George Spencer's earlier work on temple donations of livestock in early medieval south India.[59] The argument, while interesting, is by no means wholly persuasive; but the problem remains that too little work has been done on the period to enable us to proceed much further in terms of generalization. If indeed one of the key distinctions between 'administered trade' and other forms of market lies in the manner in which prices are formed, and the extent to which they freely fluctuate, much would depend on the price evidence. Here, besides occasional scraps of information gathered together by historians of an earlier generation such as Appadorai and Sastri, we have little to go by.[60]

The early medieval centuries in the rest of India are scarcely better illuminated. The work of John Deyell, which we have discussed at some length above, focuses largely on money, but the numismatic evidence is unable to throw much light on the structure or evolution of markets. In the years after the formation of the Delhi Sultanate, the chronicles speak of the setting up of a number of medium level centres (*qaṣbas*), inhabited by Muslim military specialists and gentry, between the Punjab and the middle Gangetic valley.[61] They do not tell us a great deal about the role of these centres, either by themselves, or in relation to larger centres such as Kara, Benares or Jaunpur. Again, the marketing of rural produce remains obscure; the suggestion often is, following the chronicler Zia Barani, that peasants sold grain 'by the side of their fields' to *kāravānīs*, who took the produce in pack-bullocks to centres such as Delhi. Besides these itinerant traders, who were the precursors of the *bañjārās* of the sixteenth and seventeenth centuries, mention is sometimes made of other long-distance traders

[59] George Spencer, 'Temple money-lending and livestock redistribution in early Tanjore', *The Indian Economic and Social History Review*, vol. III, 1968, pp. 277–93.

[60] A. Appadorai, *Economic Conditions in Southern India* (AD 1000–1500), 2 volumes (Madras, 1936); K.A. Nilakantha Sastri, *The Colas*, 2nd edition (Madras, 1955).

[61] Cf. Sunil Kumar, 'The emergence of the Delhi Sultanate, 588–685/1192–1286', unpublished Ph.D. dissertation, Duke University, 1992, pp. 165–71. Kumar argues that the *qasbas* of the early thirteenth century 'did not possess the commercial, rural-urban market functions which were to become one of their distinguishing characteristics in a later time period'. Instead, they were usually fortified encampments, at times but not always associated with a town. However, certain *qasbas*, like Baran (modern Bulandshahr) apparently did play a role as centres of consumption and hence exchange already in this period.

belonging to specific communities, such as the Multanis and Sahs, who are prominent in the late thirteenth and fourteenth centuries. However, the latter seem to have specialized in high-value commodities rather than the bulk goods moved by the *kāravānīs*.[62]

This still leaves us groping in the dark to define the nature of the market structure in these centuries. Irfan Habib has argued in this context, focusing in particular on the reign of 'Ala al-Din Khalji (r. 1296–1316) that forms of 'administered trade' existed in the north as much as in the south. Considering the case of the so-called 'price regulations' put in place by 'Ala al-Din, he argues that the Sultan's intention was to create a sort of dual economy, with a core region where prices would artificially be kept down and a peripheral region where prices would be somewhat higher. The purpose of this dual economy was to reduce the expenses incurred by the treasury on the maintenance of armed forces, since the supplies for these purposes could be purchased now at an artificially low price. At the same time, the dual price policy would induce a sort of 'drain' of resources from the periphery to the core. How could such a system have worked effectively? It would appear that two problems would have arisen in this context. First, as the experience of other times shows (and as Habib himself concedes for the reigns of 'Ala al-Din's successors), administered price systems of this type may lead to a disappearance of commodities from the market, or at least a shortfall in supply. In turn, a form of 'black market' would arise as a consequence, where commodities would obtain a rather higher price. The second problem concerns how arbitrage profits would be avoided in this system. If goods were so cheaply available in the 'core', what was to prevent merchants from buying them there, and selling them at a higher price in the 'peripheral' region? Habib appears to argue that this was avoided because 'Ala al-Din built a sort of political alliance with merchant groups such as the Multanis, who hence did not act contrary to the Sultan's interest. This was achieved using threats if one follows Barani (who claims that the *kāravānīs* families, and goods, were held hostage), or economic incentives if one follows another contemporary account.[63]

Habib's 'defence of Zia Barani' thus raises a number of un-

[62] Irfan Habib, 'Northern India under the Sultanate: Non-Agricultural Production and Urban Economy', in Raychaudhuri and Habib, eds., *Cambridge Economic History of India*, vol. I, p. 83.

[63] Ibid.

resolved questions. Could a 'command economy' of the sort that Barani seems to attribute to 'Ala al-Din actually have existed at the time? Did the state have the resources, even for a period of time, to police markets in such a way as to ensure that its writ on prices ran? Whereas Hall's notion of 'administered trade' seems to rest at least partly on a notion of customary-sanction for prices, the picture presented by Habib gives a great deal more centrality to the state's power over the economy.

The notion of a division of the territories of north India into a core and periphery is nevertheless significant for another reason: it signals that there were definite limits to the extent of regional integration of markets in the medieval epoch. This is also one of the implications of Deyell's essay on the 'China connection' of the Bengal Sultanate, where he argues that numismatic evidence suggests that Bengal was better supplied with precious metals in the fourteenth and fifteenth centuries than northern India. The reasons for this, he argues, probably lay in the relatively strong integration of Bengal, with the economies of Burma, Yunnan, and Southeast Asia in the epoch, in contrast with a relatively weak link with northern India. His conjecture is confirmed by early Portuguese sources, which stress the supply of silver to Bengal from the ports of Burma (with the mines lying inland, perhaps in Yunnan), and by other materials of a political and cultural nature which point to close ties between Arakan and Pegu and the Sultanate of Bengal.[64] Thus, for instance, cowries, used as a low-value money in Bengal and Orissa in the period, were equally in use in Yunnan.[65] Since the history of the Bengal Sultanate in the fifteenth century is still only imperfectly set out in the literature, much work is needed before the precise nature of the connections and divisions can be set out.

It is the lack of work on regional economies that acts as a barrier

[64] On Bengal and Burma in the early sixteenth century, see Geneviève Bouchon and Luís Filipe Thomaz, *Voyage dans les Deltas du Gange et de l'Irraouaddy: Relation Portugaise Anonyme (1521)* (Paris, 1988); also M.R. Tarafdar, *Husain Shahi Bengal, AD 1494–1538: A Socio-Political Study* (Dacca, 1965).

[65] On Yunnan, see Hans-Ülrich Vogel, 'Cowry trade and its role in the economy of Yunnan, the ninth to the middle of the seventeenth century', in Roderich Ptak and Dietmar Rothermund, eds., *Emporia, Entrepreneurs and Commodities in Asian Trade, c. 1400–1700* (Stuttgart, 1991), pp. 231–62. On cowries, also see James Heimann, 'Small change and ballast: Cowry trade and usage as an example of Indian Ocean economic history', *South Asia*, (N.S.), vol. III, (1), 1980, pp. 49–69.

to any substantive generalizations on the nature of market structure for the later medieval period all over India. Where such generalizations have been attempted therefore, it has been with a focus on the seventeenth and eighteenth centuries, as we see in the papers by B.R. Grover and K.N. Chaudhuri in this collection. Grover's article, first published in the mid-1960s, is now recognized as a pioneering work, although for long it did not enjoy such a status. Certain aspects of the argument, such as the notion of an unambiguous decline in commercial activity in the course of the eighteenth century in north India, would now be challenged by many, but other strands remain valid and useful. The paper's principal thrust is revealed from the title itself, which speaks of an 'integrated pattern of commerce', which its author sees as revealed through an analysis of the hierarchy of urban centres in north India. The same idea is generalized and given further sophistication by K.N. Chaudhuri, who speaks in clear terms of a hierarchical system of market-centres, divided into levels ranging from 'emporia and entrepots' which catered to long-distance trade, to rural *hāṭs* and *maṇḍīs*, where local transactions were carried out. In turn, Tapan Raychaudhuri in his discussion of inland trade in Mughal India quoted earlier builds in part on Chaudhuri's constructs, and quoting Banarasidas's *Ardhakathānaka*, posits the existence of a *bāzār* and *maṇḍī* in every *pargana* of a region. The establishment of periodic markets (*hāṭs*) is said to have been among the duties of every good *zamīndār*, even if the reasons for it were not disinterested; these markets generated taxes for local authorities.

The distinctions between these markets have been brought out by a number of historians, who note that the *maṇḍī* was a wholesale market, usually for agricultural commodities (especially grain), whereas the *hāṭ* was usually a more informal affair and on a smaller scale, corresponding to the Tamil *cantai*. Usually, these informal markets were held on a designated day (or days) of the week, and to this extent bear a family resemblance to the pattern described by Skinner for China. There are however limits to the parallelism. In Skinner's China, marketing is a largely voluntary act, that links the peasant up with the wider world, not only economically but socially and perhaps politically. In contrast, it is significant that none of the historians mentioned above—whether Grover or Chaudhuri, or Raychaudhuri—explicitly oppose the notion that in India, this rural commerce was generated by the state's revenue demand. Indeed, elsewhere in his writings, Chaudhuri accepts the idea of the state revenue-take in Mughal India being

fifty per cent of the gross agricultural produce, a position which is thus not significantly different from that of Raychaudhuri or Habib. The main difference seems to be one of emphasis rather than substance.

Another significant point of emphasis in Chaudhuri's essay is his focus on financial instruments, and on the division of labour that emerged therefrom. The term 'merchant' or 'trader' is a loose one: functionally, wholesalers should be distinguished from petty shopkeepers, brokers and intermediaries (*dallāls*) must be given a particular place, and financiers of trade and production as well as bankers (*ṣarrāfs*, *mahājans*) seen for what they are. This does not imply of course that there was a one-to-one correspondence between individuals or families and roles, just as there was no strict relationship between types of markets and types of urban or rurban centres. A single merchant family could act as wholesalers, bankers, and play the role of brokers to Europeans, as abundant records from the archives of the English and Dutch East India Companies testify.

Chaudhuri's research, taken together with that of numerous others, shows that by the seventeenth century, the level of sophistication of markets in India and the commercial instruments used there was considerable. But such instruments were not available indifferently to all participants. In particular, when advance purchases had to be made, or where credit was involved, much depended on the credit of the merchant, his reputation, as well as social network within which he was embedded. As in any market, information was at a premium, but this should not lead us to suppose that these markets were wholly unpredictable or 'non-transparent' (in the infelicitous phrase of Niels Steensgaard).[66] The degree of 'transparency' was itself a function of the information possessed by the participant, which made the market less or more predictable to him, and enabled him to hedge against risk.

Few studies exist at a regional level, which enable us to perceive the precise manner in which a hierarchy of marketing centres was sustained. One attempt has been made in respect of Bayana, which in the seventeenth century was a major producer of indigo, and the present author has attempted the same in the context of the eastern Deccan in the same period. What emerges in the latter study is a

66 Niels Steensgaard, *Carracks, Caravans and Companies: The Structural Crisis in the European-Asian Trade in the Early Seventeenth Century* (Copenhagen, 1973).

complex web of dealings.[67] On the one hand, specialized marketplaces existed, dealing with particular products such as raw cotton or indigo; on the other hand, there was a whole pattern of 'rurban' centres, with a semi-agrarian, semi-commercial character, inhabited by merchant groups as well as by producers. Then again, transactions were not necessarily conducted in the marketplace. The merchant could enter into a contract with the producer at his place of work or residence, as often happened with both indigo-producers and textile-manufacturers in the eastern Deccan. Nor was it necessarily the case that the producers came to be impoverished as a consequence. A detailed survey of some villages of the Godavari delta in the late seventeenth century shows clear evidence of economic differentiation among different producing groups, with some households having quite substantial resources in terms of cattle and houses. Again, the presence of gold- and silversmith households, who also doubled as assayers and money-changers, is a marked feature of even villages with a population of less than a thousand.

Be that as it may, the purpose of regional studies would be undermined were we to assume that what obtained in one region was true of every other. Other areas, less productive, with more imperfect markets, may have had a rather different experience in this respect. The sophisticated systems of *huṇḍī* networks evidently did not encompass the entire subcontinent even at their height, and left large gaps and interstices too. The extent of monetization and commercialization by the early modern period are thus surveyed by Frank Perlin, who takes note of areas of both integration and the lack thereof. Perlin in this paper, as in several others that he has written over the past decade, is concerned to locate India in a larger Euro-Asian continuum, in order to identify the specificity and generality of the monetary and commercial instruments in use. The thrust of his argument in general, has been to stress the multiplicity of participants in the process and thus to challenge the interpretation that gives to the central state a determining role in defining the pace and nature of commercialization and monetization.

[67] Sanjay Subrahmanyam, 'Rural industry and commercial agriculture in late seventeenth century south-eastern India', *Past and Present*, no. 126, February 1990, pp. 76–114. On Bayana, see Hiromu Nagashima, 'Indigo Production and Circulation in North India during the seventeenth century: A study of that of the Bayana tract', *The Shirin*, vol. LXIII, 1980, pp. 527–60 (in Japanese with an English summary).

Prices and the Price Revolution

The papers collected in this volume testify at one and the same time to the richness and to the poverty of the historiography on money and markets in medieval and early modern (pre-colonial) India. They are unevenly distributed in time; with the best of efforts, the period before 1500 could only be represented in four papers. The problem remains that beyond basic numismatic calendaring, the real monetary history of much of India before 1500 remains to be written. With a few honourable exceptions, such as John Deyell's work, the field remains largely barren in terms of interpretative essays. We are able, in the case of the Mughals for example, to trace using the coins themselves the distribution and within rough limits even the relative productivity of different mints, and recent work by Om Prakash, Perlin and others has even tried to establish the existence of different organizational regimes in different mints in Mughal India. In some, merchants appear particularly closely linked with the working of the mints (as in Mughal Surat), while in other areas, the mint remained controlled by government officials. However, for pre-Mughal north India, as well as southern India even after 1500, the working of mints remains shrouded in mystery. Some historians have concluded for the south, on the basis of numismatic evidence, that the very unevenness of quality and purity of coinage must be read as a sign of lack of state control.[68] On the other hand, Perlin's work has together with that of some other writers like James Heimann brought to the fore the existence of non-minted money, particularly used in low-value transactions.[69] Typical examples are bitter almonds, certain types of seeds, and most importantly cowrie-shells. So important were cowries in Bengal that, as we have already observed, the term *kauḍi* came to become synonymous with money itself.

Another major problem area remains the history of prices, which is of course intimately bound up with money and the market. Here, while we certainly have some data, we are far from having a long term series for the period of the sort that Phelps-Brown and Hopkins (among others) have constructed for England in respect not only of

68 R. Nagaswamy, *Tamil Coins: A Study* (Madras, 1981), pp. 161, 163–79.

69 Frank Perlin, 'Money-use in late pre-colonial India and the international trade in currency media', in J.F. Richards, ed., *The Imperial Monetary System of Mughal India*, pp. 232–373; Heimann, 'Small change and ballast'.

prices, but wages and other categories of income.[70] This volume, initially conceived as being on 'Money, Prices and Markets' had hence to be modified to take this fact into consideration. The period before 1500 is particularly poorly served in terms of price evidence, and matters improve only slightly thereafter. Nevertheless, using certain theoretical constructs, historians have over the past few decades attempted to develop a sort of implicit price history for the subcontinent. The most important of these constructs, which links monetary history with the history of prices, is the so-called Quantity Theory of Money. As stated in an early version by Irving Fisher, the Quantity Theory asserted that money supply (M) and prices (P) moved in parallel with one another, provided the volume of transactions (T) and the velocity of circulation (V) remained constant (this relationship being expressed by the equation MV = PT). An increase in the quantity of money thus increased prices; however, even an increase in the velocity of circulation could cause an increase in prices (or inflation), if all other factors remained constant.[71]

This theory is consistent with a situation where money is token in character, or even where money is metallic and has an intrinsic value. In the latter case, an increase in money supply can either take place because of an increased production or net import of coinage metal, or on account of the debasement of coinage (when the face value of a coin ceases to be equal to its intrinsic value). Further, it may be argued within the terms of this theory that inflation feeds on itself; if money supply increases causing prices to rise, people are ever more anxious to rid themselves of coins and hence drive up the velocity of circulation, which in turn causes prices to rise further. It was argued in the early part of this century that such a logic lay behind not only

[70] Henry Phelps-Brown and Sheila V. Hopkins, *A Perspective on Wages and Prices* (London, 1981), which reprints articles published by these authors, most importantly in *Economica*, between 1955 and 1961. For another major contribution to the debate of those years, see Y.S. Brenner, 'The inflation of prices in early sixteenth century England', *Economic History Review*, 2nd series, vol. XIV, 1961, pp. 225–39.

[71] For Fisher's original formulation, see Irving Fisher, *The Purchasing Power of Money: Its Determinants and Relation to Credit, Interest and Crisis*, first edition 1911, second edition 1922, reprint (New York, 1963). For a discussion of Modern Quantity Theory, see—besides the articles of Flynn cited below—Michael D. Bordo and Lars Jonung, *The Long-run Behaviour of the Velocity of Circulation: The International Evidence* (Cambridge, 1987), which conveniently sums up both theory and empirical studies.

the so-called hyperinflations that occurred in the 1920s in Europe, but equally that the sudden increase in the production of coinage metal (especially silver, but also gold) in the early modern period had had the effect of causing widespread and destabilizing inflation. In terms of this logic, Europe, though recovering from the crisis of population and production caused in the fourteenth century by the plague and associated epidemics, nevertheless was characterized by a shortage of coin and hence low price levels in the fifteenth century. The discovery of the New World changed this situation entirely, as in the early sixteenth century the gold and silver of indigenous empires in Mexico and central and south America were brought to Spain as the tribute from conquest, and even more so when the systematic exploitation of mines in America began later in the same century. Suddenly, Spain, and Europe more generally, was awash in silver, as 'pieces of eight' (*reales de a ocho*) became the symbols of power and prestige.

Analysing the consequences of this inundation of silver for the western European economy, the American historian Earl J. Hamilton argued already in the 1920s and 1930s that the impact was essentially inflationary, and hence redistributive of incomes, terming the change no less than a 'Price Revolution'.[72] It was argued that since inflation

[72] Earl J. Hamilton, 'American treasure and the rise of capitalism, 1500–1700', *Economica*, vol. XXVII (Hamilton: 1929), pp. 338–57; *American Treasure and the Price Revolution in Spain, 1501–1650* (Harvard, 1934); the issue was revisited in what is recognized as a classic survey, namely Fernand Braudel and Frank C. Spooner, 'Prices in Europe from 1450 to 1750', in E.E. Rich and C.H. Wilson, eds., *The Cambridge Economic History of Europe*, vol. IV (Cambridge, 1967), pp. 378–486. For a recent overview, Dennis O. Flynn, 'Comparing the Tokugawa Shogunate with Hapsburg Spain: Two silver-based empires in a global setting', in James D. Tracy, ed., *The Political Economy of Merchant Empires: State Power and World Trade, 1350–1750* (New York, 1991), pp. 332–59, which stresses the point made by Michel Morineau and others—but still insufficiently understood by Indianists—that Hamilton to the contrary, Spanish imports of silver from the New World did not enter into decline in the second quarter of the seventeenth century; they merely shifted from official to unofficial channels. Also useful is Dennis O. Flynn, 'Use and misuse of the Quantity Theory of Money in early modern historiography', In E. van Cauwenberghe and F. Irsigler, eds., *Minting, Monetary Circulation and Exchange Rates* (Trier, 1984), pp. 383–417, which serves as a corrective to the confused thinking on monetary issues that still pervades much historical literature, and of which the most prominent recent example is Jack A. Goldstone, *Revolution and Rebellion in the Early Modern World* (Berkeley, 1991). This is a somewhat illogical reformulation of Fisher's Quantity Theory, with a literalist understanding of the concept of 'velocity of

tends to apportion income away from those whose earnings are fixed in money terms to those whose earnings are determined residually, the 'price revolution' must have favoured profit earners over wage earners, and thus helped the accumulation of capital over time. To the extent that such an 'original accumulation' of capital was needed to finance the Industrial Revolution, we can see the Price Revolution as playing an important role in facilitating the dramatic economic changes that occurred in the second half of the eighteenth century. The paradox, however, was that the main gainers (and industrial leaders) in the longer term were not Spain and Portugal, which had been the initial recipients of silver and gold from the New World, but their trading partners in north-western Europe. In this view, then, the Price Revolution gave Britain its first industrial age, and Spain was left to content itself with the Age of Don Quixote.

Now, the silver (and to a lesser degree, gold) of the New World did not remain in Europe alone. As we have already discussed above, in the context of the emergence of the tri-metallic system of currency in Mughal India, silver availability in Asia too improved substantially over the sixteenth and seventeenth centuries. Recent researches suggest that Japanese production played a significant role in this process, but there is no gainsaying the importance of silver flows originating in the New World. European agents, first the Portuguese, and later the Dutch and English East India Companies, brought precious metals into Asia via the Cape route; this was supplemented by the direct trans-Pacific flow from Latin America (the port of Acapulco) to the Philippines, and thence into China and the rest of Asia. But of at least as great significance until late in the seventeenth century was the silver brought from Europe into the Ottoman domains and Iran, either through the Mediterranean or via Russia, a good part of which flowed into south Asia and beyond. The history of, and quantitative materials on this connection have been traced in a paper in this collection (also by the present author); what is particularly significant is that the period witnessed monetary turbulence in both the Ottoman and Safavid domains, of a sort that suggests parallels with the European 'Price Revolution' of Hamilton. Historians of the Ottoman empire such as

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money'; thus, to Goldstone, urbanization and economic growth lead ineluctably to inflation, as does the expansion of credit networks and monetization. The fact that these processes underlie an expansion in the demand for money appears to escape him.

Ömer Lütfi Barkan and Fernand Braudel certainly believed that there was significant inflation there in the late sixteenth and early seventeenth centuries, and Barkan even termed this a 'turning point' in Ottoman economic history.[73] His purpose was not to suggest, in the manner of Hamilton, that the roots of industrial capitalism in the region could be found in this period. Rather, he argued that inflation caused widespread social turmoil, precipitated rebellions against central authority, and left the region vulnerable to the penetration of European traders with hegemonic intentions.

Later writings have disputed the empirical basis of some of Barkan's generalizations, just as Hamilton's data have been contested for Europe. However, while the empirical basis for diagnosing inflation in Europe remains largely intact despite the attacks, it now appears that a major cause underlying social tensions in the late sixteenth century Ottoman domains was indeed monetary, but was caused by the state's policies of debasement of coinage rather than by inflation caused by silver import. The same appears to be the case in Safavid Iran, where the third quarter of the seventeenth century witnessed periodic economic distress, on account of unseasonal and heavy snowfall, bad harvests, episodic bouts of plague, and a shortfall in government revenues on account of heavy military expenditures (in campaigns directed partly at the Mughals)—all of which were greatly exacerbated by a policy of debasement under Shah 'Abbas II and Shah Solayman.[74]

[73] Ömer Lütfi Barkan, 'The Price Revolution of the Sixteenth Century: A Turning Point in the Economic History of the Near East', *International Journal of Middle East Studies*, vol. VI, 1975, pp. 3–28; this is an abbreviated version of an article in Turkish, entitled 'XVI. Asrïn Ikinci Yarïsïnda Türkiye' de Fiyat Hareketleri', *Belleten*, no. 34, 1970, pp. 557–608. A partial critique may be found in Holm Sundhaussen, 'Die "Preisrevolution" im osmanischen Reich während der zweiten Hälfte des 16. Jahrhunderts: "Importierte" oder intern verursachte Inflation? (Zu einer These Ö.L. Barkan's)', *Südost-Forschungen*, vol. LXII, 1983, pp. 169–81, which makes an argument for demand-based inflation, while another author is sceptical about the very notion of Ottoman inflation; this is Haim Gerber, 'The monetary system of the Ottoman empire', *Journal of the Economic and Social History of the Orient*, vol. XXV, 1982, pp. 308–24. The most recent discussion is in Kafadar, 'Les troubles monétaires de la fin du XVI siècle', pp. 387–89, which unfortunately also adopts a rather naive Fisherian stance (like Goldstone cited in note 72 above), maintaining that population growth, urbanization, the growth of commerce and monetization are all causes of early modern inflation.

[74] Rudolph P. Matthee, 'Politics and Trade in Late Safavid Iran: Commercial Crisis and Government Reaction Under Shah Solayman (1666–1694)', Ph.D.

It should be noted in this context that in Iran, as in the Ottoman empire and Spain, silver passed through the economy *en route to* another destination. Unlike the Ottomans, the Safavids did not allow foreign coins to circulate freely in their realm, insisting (in this respect like the Mughals) on melting down and reminting, largely into *mahmūdīs* and '*abbāsīs*. Now, the fact that the economic chaos and distress was largely caused by *debasement* and not by silver import and export per se did not escape the notice of contemporaries in Iran. One such, the draper-poet Mulla Qudrati, wrote the following enigmatic verses on what he termed the *inqilāb-i diram* ('monetary revolution'!) in 1653–4:

Unrest rose from a deep sleep
as people were weighed down by dirhams like the fish

Isfahan's money is as worthless
as if there were a dragon in every money-bag

Money is in plenty, but beggars refuse it,
as if its lion were a man-eater

The world has become so topsy-turvy from copper
that the fish has become bent under the earth

Gold does not turn white by people's touch
everyone who sees it claps his hands from afar

The dirham is now so despised by men
that even the wealthy have turned generous

Money's face these days is like a lion's
as both young and old run for fear of it

The creditor flees the borrower
never did the world see such ways

Would that the lord of the world (*shāh-i 'ālam*) in his bounty
makes the dirham a lion-catcher

Let him make two of these unworthy coins one
so that they may acquire unquestioned currency

The counterfeiters' hand would
be severed piece by piece by the sword of justice

At the time of the monetary revolution (*inqilāb-i diram*)
I was worried by both dearth and plenty

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dissertation, University of California at Los Angeles, 1991, chs 4 and 5, 'The Politics of Money' and 'The Politics of Minting'.

Reason said: Quick, tell me the truth.
When the dirham doubled, gold attained its worth.[75]

Much of the metaphorical play in the poem centres on the lion-head that appeared on coins, and on the fish which in mythology bears the world on its back, but there is also a keen sense of the absurdity of plentiful, but debased, money—which no sensible creditor would accept in payment for an old debt. The true measure of worth became the gold ducat, to which merchants shifted in preference to debased (at times, even counterfeit) silver currency.

It is evident that the monetary convulsions referred to above, and which persisted into the 1680s and beyond the so-called 'mint reform' instituted by the Safavid *wazīr* Shaikh 'Ali Khan, can be interpreted in at least two ways. One may treat them as an example of the destabilizing impact of imports of precious metals (thus, as a variant of Hamilton's construct), or we may seek their causes in other factors of political economy—in particular the balance of revenues and expenditures—on the premise that monetary problems themselves 'usually do not create a crisis, but merely signal it and mark its timing'.[76] If we follow the latter line of thought, it would seem that the Safavid problem lay in a sort of bullionist ideology, which prompted the state to try and prevent (or at least stem) the flow of precious metals to India, which arose in fact from the very character of trade between the two regions. The state found that neither debasement nor physical bans on bullion export were effective means to effect its bullionist intentions, since it did not manage foreign trade in the sort of insulated and antiseptic regime that the Tokugawa Shoguns devised in this period in Japan, for example, in order to deal with the Dutch East India Company.

With this as our background, we may approach afresh the issue of price history in India after New World silver entered into international circulation. Evidently, the comparisons with both Iran and the

[75] Ibid., pp. 124–7, citing the text in Mirza Muhammad Tahir Nasrabadi Isfahani, *Taẓkira-yi nasrābādī*, ed. Hasan Wahid Dastgardi (Teheran, 1938), p. 421, and a discussion in Iraj Afshar, 'Inqilāb-i diram' dar zamān-i Shāh 'Abbās-i duwwum', *Tārīkh*, no. 1, 1976, pp. 267–74. I have occasionally permitted myself to modify the translation to clarify its meaning.

[76] This formula, based on a paraphrase of Pierre Vilar, *A History of Gold and Money, 1450–1920* (London, 1976), is cited in Matthee, 'Politics and trade', p. 324. Evidently, Vilar's neo-Marxist perspective does not permit him to allow monetary phenomena any autonomy of domain!

Ottoman domains are far from straightforward, in view of the fact that silver flowed into India from these other regions (thus suggesting a sort of 'mirror image' rather than a parallel relation). The temptation may be to take recourse once more therefore to the classic, Hamiltonesque, model of bullion import, leading via the Quantity Theory of Money to inflation, income redistribution, and capital accumulation. This route has however been followed only part of the way in the historiography, where one falls short of the last stage of the process outlined above. In an oft-quoted formulation dating to a quarter-century ago, Aziza Hasan attempted to extend Hamilton's 'Price Revolution' hypothesis to India, arguing that the inflow of New World silver must have led to inflation in the seventeenth century—even allowing for a lag between the arrival of New World bullion in Europe and its arrival in India. She sought to apply Fisher's Quantity Theory of Money to the problem, and constructed not merely a profile of prices on the basis of fragmentary price evidence, but a histogram which purported to show the increase in silver money (*rupiyās*) in circulation under the Mughals. The conclusion was that northern India in the early and late seventeenth century had indeed undergone inflation, which had led to social turmoil by upsetting the social distribution of income. However, as mentioned above, no attempt was made to seek the roots of an autochthonous Indian capitalism in these processes.

Hasan's work, which gained rapid acceptance among European historians once it was given credence by Fernand Braudel, was however viewed with scepticism by some economic historians of south Asia. Om Prakash and J. Krishnamurty argued, for example, in a response to Hasan, that the precious metal imports into India depended far more on Japan than Hasan was willing to countenance.[77] Om

[77] Aziza Hazan (sic), 'Trésors américains, monnaie d'argent et prix dans l'Empire Mogol', *Annales ESC*, vol. XXIV, (4), 1969, pp. 835–59, of which the English version is reproduced in this volume; for the debate, see Om Prakash and J. Krishnamurty, 'Mughal silver currency output and prices in India in the 16th and 17th centuries: A critique', *The Indian Economic and Social History Review*, vol. VII, (1), 1970, pp. 139–50; Aziza Hasan, 'Mughal silver currency—A reply', *The Indian Economic and Social History Review*, vol. VII, (1), 1970, pp. 151–60. Subsequent work on Japan tends to shore up Om Prakash and Krishnamurty's argument, to the detriment of that of Hasan; see for example Kozo Yamamura and Tetsuo Kamiki, 'Silver mines and Sung coins: A monetary history of medieval and modern Japan in international perspective', in J.F. Richards, ed., *Precious Metals in the Later Medieval and Early Modern Worlds* (Durham, 1983), and also George B. Souza, *The Survival of Empire: Portuguese Trade and Society in*

Prakash also went on to show in subsequent work that the history of prices in Bengal did not suggest inflation in the seventeenth century, and the same was argued in other writings of the 1970s by K.N. Chaudhuri, and in the early 1980s by Joseph J. Brennig and H.W. van Santen, which marshalled price evidence from elsewhere in seventeenth century India.[78] John Deyell, another of those engaged in the debate, criticized Hasan from a different standpoint; he argued that her use of museum collections of coin survivals from the Mughal period, to build up a histogram of coinage was incorrect, since these collections were in fact biased. Rather, he suggested that coin hoards could be used more effectively in a similar analysis.[79]

The bulk of the debate was thus concerned about empirical details rather than with the theoretical basis of Hasan's construct—namely Fisher's Quantity Theory of Money. Only one of the participants in the debate, Om Prakash, appears to have had a different theoretical construct in mind, of bullion import and increasing monetary circulation *without* inflation. In this model, presented in a stylized formal fashion in 1976, and then reiterated in later writings, the strategy was to portray the pre-colonial Indian economy as Keynesian rather than Classical in character.[80] This is to say that whereas the Quantity Theory of Money assumes a logical separation between bullion flows, money supply and prices on the one hand (the so-called monetary sector), and savings, investment and production on the other (the so-called real sector), Om Prakash argued that the import of bullion implied a surplus of commodity exports over imports, which in turn must have

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China and the South China Sea, 1630–1754 (Cambridge, 1986), which render obsolete Hasan's view that Japanese silver exports were of significance only in the period 1640 to 1668.

78 K.N. Chaudhuri, *The Trading World of Asia and the English East India Company, 1660–1760* (Cambridge, 1978); Om Prakash, *The Dutch East India Company and the Economy of Bengal, 1630–1720* (Princeton, 1985); Joseph J. Brennig, 'Silver in Seventeenth-Century Surat: Monetary Circulation and the Price Revolution in Mughal India', in J.F. Richards, ed., *Precious Metals in the Later Medieval and Early Modern Worlds*, pp. 477–96; H.W. van Santen, *De Verenigde Oost-Indische Compagnie in Gujarat en Hindustan, 1620–1660* (Leiden, 1982).

79 John S. Deyell, 'Numismatic methodology in the estimation of Mughal currency output', *The Indian Economic and Social History Review*, vol. XIII, (3), 1976, pp. 393–401.

80 Om Prakash, 'Bullion for Goods: International trade and the economy of early eighteenth century Bengal', *IESHR*, vol. XIII, (2), 1976, pp. 159–87.

stimulated investment and production in the economy. Thus, the foreign trade sector not only provided more bullion to the economy, but more goods were produced in the process; this growing economy could thus sustain a higher level of demand for precious metals, without inflation.

Such a model is not free of its own theoretical and empirical problems, since it was adapted rather freely from the context in which it was initially put forward—of economies which were characterized by underemployed resources, and which could hence respond easily (and without reallocating resources from other activities) to the 'trade stimulus'. It is not immediately obvious that pre-colonial India, with its still-favourable land-man ratio, was in fact characterized by widespread underemployment or involuntary unemployment. Further, the view that bullion should be treated not as a traded commodity but as a balancing item, settling trade deficits and surpluses, is a characteristically nineteenth century one, and cannot be applied irrespective of the context. But, later contributions to the debate such as an essay by Shireen Moosvi, even though critical of Om Prakash, have not however touched on these issues.[81] Rather, Moosvi has attempted to revive Aziza Hasan's hypothesis by suppressing the price evidence on the one hand, while on the other attempting to take account of the criticism of John Deyell summarized above. Moosvi, basing herself now not on the museum collections but the discovered coin hoards of one region, Uttar Pradesh, has reconstructed a histogram of silver currency under circulation in the seventeenth century, and even gone on to estimate the absolute number of coins (*rupiyās*) available in different years. The assumptions underlying this analysis are, to put it mildly, heroic in nature, and greatly underestimate the variance factor in any statistical technique of this sort. At best, the histogram may indicate some broad trends in direction where the minting of silver coins is concerned, but the rest of the analysis—particularly the estimate of the numbers of coins in circulation in given years—is simply unsustainable.

81 Shireen Moosvi, 'The silver influx, money supply, prices and revenue-extraction in Mughal India', *Journal of the Economic and Social History of the Orient*, vol. XXX, 1, 1987, pp. 47–94. Another recent contributor to the debate, at variance with both Moosvi and Om Prakash, reiterates the idea (which has roots at least as far back as Keynes) that there was no inflation in India and the East more generally because of irrational hoarding of precious metals there; Cf. Charles P. Kindleberger, *Spenders and Hoarders: The World Distribution of Spanish American Silver, 1550–1750* (Singapore, 1989).

It appears besides that both Moosvi and earlier Deyell have neglected to ask a number of significant questions concerning the nature of the coin hoards themselves. Can we treat these hoards as being random and thus representative samples of coinage production? To do so ignores the conditions under which coins were buried under the ground never to be dug up again by those who buried them—which must usually have been moments of unusual upheaval. Further, it ignores the extremely small size of the sample, which for U.P. between 1882 and 1968 is around 7,400 Mughal coins from the mints of north India in the years from Akbar to Aurangzeb. In this context, Moosvi writes rather optimistically:

> The region [U.P] is very large and also occupies a central position in northern India; it contained a large part of the core area of the Mughal empire including its capital city, Agra. Coin-finds within it are therefore likely to represent fairly well not only the issues of the entire period we are concerned with, but also the issues of various parts of northern India without any significant geographical bias.[82]

The first part of this statement is unexceptionable: the region is indeed quite large, and did overlap to a fair extent with the heartland of the Mughal empire. But how this demonstrates that the hoards found there are temporally unbiased ('the issues of the entire period') or spatially unbiased is a moot point. True, coins from mints in Gujarat, the north-west and Bengal are quite well-represented in the sample, besides coins from the central or inland mints. However, their shares vary rather sharply over time between 1596 and 1635; to start with, coins from Gujarat dominate (accounting for over half the total in the decade 1596–1605), then coins from the north-western and central mints emerge into prominence, and finally—by the decade 1626–35—Bengal is ahead of all other regions in the sample. These are curious changes, and can hardly be taken to be representative of the shifts in relative mint output in the region—unless one is prepared to take a rather elastic approach to the facts, moulding them to fit the conclusion.

In any event, whatever be the history of coin production in Mughal times, the case for a Price Revolution remains unproven. As has been argued elsewhere in this volume, the empirical materials do not sup-

[82] Shireen Moosvi, *The Economy of the Mughal Empire, c. 1595: A Statistical Study* (Delhi, 1986), pp. 354–5. Also see my review of the book in *The Indian Economic and Social History Review*, vol. XXV, (1), 1988, pp. 103–7.

port such a hypothesis even in their present, fragmentary, form.[83] If, moreover, as Moosvi and others have argued, rates of interest in centres like Surat, Ahmadabad and Agra showed a downward trend over the seventeenth century, the matter becomes that much more complicated. To the extent that the rate of interest was related to the demand for money, we would expect the link between money and prices to be that much the weaker; indeed Fisher's version of the Quantity Theory of Money rests very largely on the assumption of a lack of relationship between money demand and the rate of interest. However, if money were seen as an asset, and demanded for speculative as much as for transactional reasons, its demand would be interest-elastic as well. Adopting this approach takes us not merely beyond Fisher's Quantity Theory but its successor, the so-called Modern Quantity Theory (which links money and prices not to transactions but real income). We thus find ourselves inching towards a model that links money and prices not in the terms of Hamilton, but quite differently, indeed even paradoxically from Hamilton's point of view. Safavid Iran and the Ottoman empire suffer here from inflation, but claim at the same time to be starved of specie, with their statesmen attempting to halt the outflow of gold and silver. This is an inflation of debasement and not of a fall in the relative price of precious metals to other goods. Can it not have been then that India, where diligent searches through the literature have not yet yielded up a voice like that of Mulla Qudrati, may have absorbed precious metals equally without inflation (and without debasement of coinage)? If, in the seventeenth century, real incomes were growing even modestly and a gradual shift was underway from non-monetized to monetized dealings, a fairly substantial import of precious metals in absolute terms could have been sustained year after year. The paradox may thus be an illusion, resulting from the fact that the questions have so far been asked within the wrong framework.

Summing Up

Price history is not the only area where shortcomings can be found in the literature. A general lack of a regional orientation has meant that the trends of one area have often been assumed, by default, to obtain

[83] Cf. Sanjay Subrahmanyam, 'Precious metal flows and prices', in this volume.

everywhere. The fact remains that the processes of monetization and commercialization in India over the six centuries under our consideration were uneven ones seen from two points of view. Seen temporally, these processes undoubtedly proceeded in fits and starts, gaining pace in some periods but falling slack in others. Viewed spatially too, these processes must have been uneven ones, accentuating certain differences even as they levelled others.[84] Stated at this level of generality, such statements may seem unexceptionable. But when concrete work, rooted in the sources, appears on specific areas and periods, it will undoubtedly contribute to debates and controversies conceived in precisely these terms.

The present state of the debate on not merely money and the market, but the economic history of pre-colonial India in the centuries 1100 to 1700 in general, has sometimes been defined in terms of two polar positions. One position, which involves a synthesis of the writings of R.S. Sharma, Irfan Habib, Tapan Raychaudhuri and others of the 'Aligarh school' would appear to be that the main characteristic of change was cyclicity, as Indian feudalism gave way to the later medieval economies. Phases of expansion were inevitably followed by other phases of contraction: and political consolidation was related directly to economic growth, monetization, and even cultural efflorescence. The phase from the early thirteenth to the mid-fourteenth century represents one such phase of upswing, but is followed by a plateau and then a phase of decline (extending through the fifteenth century into the early sixteenth century). A similar cycle is then set in motion from the mid-sixteenth century. Political consolidation, commercialization, monetization, all are presented as characteristics of the Mughal empire of Akbar. An ill-defined age of hiatus follows, and then decline sets in from the late seventeenth century (perhaps from as early as 1660s). This Phase B (of decline) then continues through the eighteenth century.

The polar opposite of this position is represented by certain other writers, who see change and growth as more or less linear from the early medieval centuries through to about 1800. It would appear to be

[84] This was the case in Europe as well. Unfortunately, however, we are still far from being able to produce a synoptic view for India such as that of Peter Spufford, *Money and its Use in Medieval Europe* (Cambridge, 1988), or even detailed studies of specific regions or cities such as Harry A. Miskimin, *Money and Power in Fifteenth-Century France* (New Haven, 1984), or Carlo M. Cipolla, *Money in Sixteenth-Century Florence* (Berkeley/Los Angeles, 1989).

the position of some of these writers, like André Wink, that no points of inflection, hesitancies, or reversals of conjuncture existed in Indian economic history from the eighth century on.[85] Now, as a construct, this 'growthmanship' is very like 'changelessness'; only whereas earlier, no change in the structure had been posited, now there is no change in the process. There is thus no change in the rate of change, which is assumed to be smooth, automatic and which is never scrutinized by any quantitative means whatsoever.

Whatever scepticism one may have about the first of the positions mentioned above, the second is clearly not a viable alternative to it. To assert change is not to define its direction in a teleological sense, or to state that it was always and everywhere even (and based on some notion such as the 'Hindu rate of growth'). One can no more accept a choice within this dichotomy than make a normative choice between characterizing the market as an ideal institution for economic and social adjustment, and the market as a monstrous and tyrannical machine. Nor does the truth, despite the cliché, lie somewhere *between* the two save in the trivial sense that any process of change over time is likely to have some cumulative and some cyclical features. It is evident that new frameworks have to be found, perhaps more limited in their ambition and paying more attention to regional and temporal detail than existing ones, in order to pose questions that will yield us answers other than the familiar, comfortable, and seemingly unassailable ones that we are offered today.[86]

[85] André Wink, *Al-Hind*, cited in note 18 above.

[86] Future discussions may also wish to consider the nature of pre-colonial 'factor markets', which a paucity of literature has prevented us from doing here.

Chapter One

Price-making and Market Hierarchy in Early Medieval South India

KENNETH R. HALL

Historical scholarship on trade in ancient India has attempted to identify the place of commerce within a society which was primarily not trade oriented. But even in such an agrarian society, trade seems to arise naturally as a result of the geographic dispersal of the products of the soil, due to their different requirements of temperature, humidity, soil quality, etc. For example, wet rice agriculture is confined to areas meeting the requirements for its growth, areas with large amounts of water readily available, while areas with little water adapted their agriculture to accommodate their habitat. Only certain areas of the Indian subcontinent produced spices, pepper for example, necessitating trade to articulate their distribution to non-producing areas.[1] Similarly, areca-nut, an item seemingly used throughout the subcontinent even in early times, was the product of a palm tree that required a specific habitat.[2] Thus, although ancient Indian society was essentially agrarian, historical sources present evidence that within the society trade flourished.

Among the available sources stone and copper plate inscriptions have proved invaluable in the reconstruction of India's historical past. Inscriptions from south Indian temples, for example, record not only gifts to a temple, usually land or money, but also interaction between

[1] For a brief summary of commerce in early India see A.L. Basham, *The Wonder That Was India* (New York, 1959), pp. 215–31.

[2] Areca-nuts are a product of a type of palm, which grows best in areas which are not subject to heavy rainfall. See Sir George Watt, *The Industrial Products of India* (London, 1908), pp. 86, 920.

the temple and its community. Though temple inscriptions were primarily religious documents emphasizing actions which affected the temple itself—events which were often reported using a good deal of culturally symbolic vocabulary—by the analysis of key words and phrases, both political and economic activities as well as degrees of social interaction, though ill-reported, may be established. This essay, as with other scholarship which is based on these incomplete and fragmentary sources, is necessarily speculative. While recognizing that the sources impose limitations, we have formed certain impressions of the data and intend to suggest ways, using the available inscriptional records, in which early Indian trade and the market centres which came to dominate it may be examined.

This essay is based on the author's examination of Tamil inscriptions dating to Cōḷa times (AD 850–1279), the golden age of early medieval south Indian civilization. An important feature of south India's political landscape during this period was administratively autonomous village and regional assemblies known as *ūr*, *nāḍu*, *brahmadēya*, and *nagaram*, which had remained stable despite the rise and fall of several imperial dynasties. This study focuses on the assembly of regional commercial centres, known as *nagaram*, and this institution's administrative and marketing functions. By examining the position of trade and traders within south Indian society this study proposes that commerce was institutionalized to mitigate its more harmful effects. An analysis of the distribution of *nagaram* suggests that there was a maximum of one *nagaram* in each traditional unit of regional administration (*nāḍu*), and that this was intended to contain the commercial penetration of foreign merchants within the region's designated market, usually a *nagaram*.

By the late-twelfth century international traders considered Coromandel coast emporia among their regular ports of call. The nature of the commodities these traders acquired in south Indian ports—pearls, areca-nuts, spices, and cotton products[3]—required a regular, ongoing relationship with the hinterland to allow locally produced goods to reach the coastal centres of international exchange.[4] Various stone and

[3] See F. Hirth and W.W. Rockhill, *Chau Ju-kua: His Work on the Chinese and Arab Trade in the Twelfth and Thirteenth Centuries entitled Chu-fan chi* (St. Petersburg, 1911), p. 96.

[4] Although pearls were available along the south Indian coastal region, areca-nuts and cotton were definitely not agricultural products of the delta regions adjacent to the major ports. For the distribution of cotton production in southern

copper plate inscriptions dating to Cōḷa times suggest that there was considerable commercial activity in the south Indian hinterland and that well-organized trade networks supplied the commodities demanded by the foreign traders.

The Setting

Local commercial centres provided the setting for the exchange of goods and services in the Cōḷa domain. Such centres had streets of permanent shops (*aṅgāḍi*) where exchanges were continuously transacted.[5] *Kaḍai* are distinguished as being a different sort of commercial area which are probably best characterized as 'bazaar'. In one such bazaar street (*kaḍaitteru*) those from outside the community were said to have offered paddy, rice and other commodities which were sold by measuring, articles which were placed on the ground and sold, heaps of commodities which were sold by weight, and other goods which were sold from baskets.[6] Another feature of local commerce was the fair (*tāvaḷam*). Local inscriptions indicate that market centres held periodic fairs which convened in another area of the community. Uttaramērūr, Chingleput, for instance, held a periodic cattle market[7] while Jambai, South Arcot, was the scene of a weekly fair.[8] A thirteenth century inscription notes that in one community which held a fair each Tuesday, 'whatever official exacts tolls, firewood, grain . . . ornaments and clothes, or commissions on sales, has transgressed the order of the king . . . ,'[9] providing a clue to the variety of commodities exchanged at such a fair.

In the various inscriptions we have examined, it is our impression that within these early medieval south Indian markets the prices of

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India see *Economic Atlas of Madras State* (New Delhi, 1962), p. 52. On the growth of areca-nuts see Watt, op. cit.

[5] See, for example, *Annual Report on Epigraphy*, Archaeological Survey of India (henceforth cited by sequence number alone), 40 of 1895 (*South Indian Inscriptions*-henceforth SII—5, 597), where the *nagaram* at Tillaisthānam, Tañjāvūr, collected the *aṅgāḍikkūli* (a tax on shops) in that town's shop district. As per convention of the Archaeological Survey of India references to all inscriptions are by the modern village and district of the inscription's source.

[6] 321 of 1910 (SII, 3, 90).

[7] 74 of 1898 (SII, 6, 359).

[8] 440 of 1937–8.

[9] *Epigraphia Carnatica*, 5, Arkalgud 21 (AD 1274).

standard commodities were set and were not allowed to 'undergo the fluctuations one encounters in a modern "price-making" market of free exchange economies'.[10] For instance, as suggested in an inscription from Cidambaram which dates to the reign of Rajendra I (AD 1012–1044), there was a standard local price index on certain commodities:[11]

one measure of pepper = 5 *nāḷi* of paddy (*padi*) and 5 *ūri* of *āli* (a spice)
2 *ūri* = 1 *nāli*
5 *pala* of puli (tamarind) = 4 *nāḷi* of paddy
5 sticks of *mañjal* (turmeric) = 5 *ūri* of paddy
one *ūri* of ghee = 5 *kuṛuṇi* of paddy (8 *naji* = 1 *kuṛuṇi*)
one full measure (*uṛ*) of curds = 3 *kuṛuṇi* of paddy

[10] The work of Karl Polanyi and other modern anthropologists has indicated a difference between modern 'price-making' markets and the markets of the ancient world. Ancient markets were of two types: 'primitive' and 'administered' (see Karl Polanyi, 'The Economy as Instituted Process,' in Karl Polanyi, *et al.*, *Trade and Market in the Early Empires* (Glencoe, 1957), pp. 243–70). In Polanyi's model, primitive markets were governed by sociable gift exchanges in which there was no sense of profit. One person exchanged goods with a neighbour according to certain standards of local tradition; another reciprocated in fear of losing dignity. If one individual cultivated grain and another raised livestock, these two would exchange grain for livestock within the context of the local social system of which they were both members. Such reciprocity sustained the local community. As Marshall Sahlins has expressed it: 'bargaining was done with strangers' (Marshall Sahlins, 'On the Sociology of Primitive Exchange,' in Marshall Sahlins, *Stone Age Economics* (Chicago, 1972), pp. 185–275). In what he labels the 'generalized reciprocity of primitive exchange', there was not an effort to establish values within a local community. Similar goods moved against each other in different proportions as an exchange of 'gifts'. It was only as one moved outward, from 'gift' exchanges of equals to those between different 'communities', that one encountered haggling and bargaining. That is, theories of value came from external spheres of transactions. Yet external exchange was also institutionalized by recognizing that this was a discrete relationship between 'communities' on a less personal basis.

Exchanges with external communities within the context of an 'administered market' were recognized by Polanyi as being closely connected to and regulated by government intervention. Here the representatives of two or more distinct social groups exchanged goods. One was recognized as being the local cultural unit, the others were visitors or 'guests' who had come to exchange external commodities for local goods. The local government imposed its jurisdiction over these transactions, establishing rules for exchange, setting standards for weight and measure, and in some instances negotiating the price given to the commodities exchanged.

[11] K.A. Nilakanta Shastri, *The Colas* (Madras, 1955), p. 624, for a table of Cōḷa weights and measures.

2 1/2 . . . of betel leaf and 100 areca-nuts = 5 *nāḷi* of broken paddy
one bundle of firewood = 3 *kuṛuṇi* and 4 *nāḷi* of paddy
one *ūri* and one *āḷākku* of oil (4 *āḷākku* = 1 *ūri*) = 5 *kuṛuṇi* of paddy[12]

This inscription also notes that the yearly cost of supplying a temple cook with cloth amounted to eight *kalam* of paddy (1 *kalam* = 12 *kuruni*).

One faces the problem of how to treat such inscribed price indexes. Were they merely lists of exchange values set for a normative purpose, as for example duties or taxes (the means of payment of a tax, the ratio for computing a tax, or a basis for wealth and estate evaluation) or contributions to temples? An inscription from Tañjāvūr is of interest because it provides evidence that often such inscribed prices did relate to actual marketplace transactions during the Cōḷa age and may well relate closely to actual market prices.

In this inscription dating to the reign of Rājarāja I (AD 985–1016), when the Rājarājēśvaram temple reassigned a large grant of gold and livestock it required that the shepherds receiving gold and cows were to exchange these for ewes in the local marketplace, i.e., they were to negotiate these exchanges at the prevailing rates of market exchange. The local cash standard for ewes, as reported in the inscription, was three ewes per *kāśu* gold, although ewes of less quality appear to have been purchased at the rate of four ewes per *kāśu*. In barter exchanges one cow sold for two ewes, one she-buffalo sold for six ewes, one heifer sold for one ewe, as did one calf.[13] The donations, redistributions, and exchanges may be represented as follows:

DONATIONS AND ASSIGNMENTS OF EWES IN TANJAVUR INSCRIPTION 95

Commodity and local rate of exchange	*Ewes directly assigned by temple*	*Ewes purchased by the assignee using assigned money or cows*
Money (3 ewes/*kāśu*)		
Total Donation	594 *kāśu*	

[12] 118 of 1888 (SII, 4, 228). One of the best examples of the stability of local market rates is a series of inscriptions from Ālaṅgāḍi, Chingleput, where the price of one *nāḷi* of ghee remained at 1/3 *kalam* of paddy for a period of 31 years. See 506 (AD 1094), 518 (AD 1116), (AD 1117), and 512 (AD 1125) of 1920.

[13] SII, 2, 95, as discussed in George W. Spencer, 'Temple Money-Lending and Livestock Redistribution in Early Tanjore,' *The Indian Economic and Social*

Commodity and local rate of exchange		*Ewes directly assigned by temple**	*Ewes purchased by the assignee using assigned money or cows*
Assignment	128 *kāśu*** =		
	466 *kāśu* =	1398 (approx.)	384 (approx.)
Cows (2 ewes/cow)			
Total Donation	1620		
Assignment	1248*** =		2496 (approx.)
Difference	372 =	744 (approx.)	
She-Buffalo (6 ewes/buffalo)			
Total Donation	40		
Assignment	0		0
	40 =	240 (approx.)	
Approximate Total of Ewes		2392 (approx.)	2880 (approx.)
Purchased			
Ewes			
Total Donation	2563	2563	
Assignment	4896	4896	
Approximate Total of Ewes			
Purchased in the Market		2880	
By Those Assigned			
Money or Cows			
Approximate Total of Ewes			
Reassigned as a Result of Grant		7776	

* Including those purchased by the temple in money, cows, or buffalo.

** Assigned to shepherds with the stipulation that the money be used to purchase ewes.

*** To be immediately exchanged for ewes.[14]

History Review, v, no. 3, 1968, p. 284. Spencer suggests that these prices were determined by the milk output of each of the animals, as one she-buffalo's output was equal to that of three cows or six ewes (p. 281). It is of interest, with this scale in mind, that the temple preferred to receive ghee from ewes as indicated by its pattern of investment.

[14] This table is based on Spencer, p. 283.

The fact that our estimates, using the market standards quoted in the inscription, and the actual total are so close would indicate that the market standards noted in the inscription were, indeed, the actual local price index.[15] This analysis may be duplicated in other inscriptions, and allows us to suggest that many prices quoted in the inscriptions of the Cōḷa age did, in reality, closely conform to the prices in the marketplaces of the communities where the records were inscribed.[16]

It is significant that most of the price lists we have examined fix the prices of the various commodities in paddy and not in cash,[17] attesting that rice was the standard of value, and perhaps also the medium of exchange in small transactions within the local market. Another inscription from the Tañjāvūr temple complex indicates that only precious articles, the staples of long-distance trade such as cardamom seeds, champaka buds, khaskhas roots, and camphor (all aromatics used in temple ceremonies) were given a cash value, while prices for standard market commodities like pepper, ghee, and areca-nuts were stated in paddy equivalents:

COMMODITIES AND PRICES IN TANJAVUR INSCRIPTION 27

Commodity	*Quantity*	*Price*
cardamom seeds	1 *kuṛuṇi* and 4 *nāḷi*	1 *kāśu* of gold
champaka buds	1 *padakku*	1 *kāśu* of gold
khaskhas roots	605 *palam*	1 *kāśu* of gold
dhal	1 *nāḷi*, 3 *uḷakku*, and 1 *āḷākku*	5 *nāḷi*, 1 *ūri*, and 1 *āḷākku* of paddy
pepper	1 *āḷākku* and 1 3/4 *cevidu*	5 *nāḷi* and 1 *uḷakku* paddy
mustard	1 *āḷākku* and 1 *cevidu*	2 *nāḷi* and 1 *uḷakku* paddy

[15] One would expect that the difference between the number of ewes the temple was capable of assigning and the number it did in fact directly assign (a difference of 59 ewes); reflected the temple's policy of retaining part of a gold endowment for its temple treasury.

[16] We have used the inscriptional data noted in this section with extreme caution, guarding that values of exchange quoted in the inscriptions were not, in fact, exchange values set for normative purposes.

[17] See 175 of 1915, 273 of 1910, 91 of 1892, 263 of 1912, and 249 of 1910, which quote local market standards for various commodities such as oil, ghee, salt, sugar, areca-nuts, etc., and equate each commodity to an appropriate quantity of paddy.

Commodity	*Quantity*	*Price*
cumin	15/16 *cevidu*	1 *nāḷi*
sugar	3 *palam*	1 1/2 *kāśu* of gold
ghee	1 *uḷakku*, 1 *āḷākku*, and 3 3/4 *cevidu*	1 *kuṛuṇi* and 1 *nāḷi* paddy
tamarind	1 *palam*	1 *nāḷi* of paddy
curds	3 *nāḷi*	1 *kuṛuṇi*, 1 *nāḷi* of paddy
gram	3 *cevidu*	1 *uḷakku* of paddy
plantains	18	5 *nāḷi* of paddy
salt	1 *uḷakku* and 1 *āḷākku*	1 *uḷakku* and 1 *āḷākku* paddy
tender leaves	12	2 *nāḷi* of paddy
areca-nuts and	30	
betel leaves	60	4 *nāḷi* and 1 *uḷakku* paddy
camphor	3 *kaḷañju*	1 *kāśu* of gold[18]

An inscription dated AD 1012 from the marketing centre of Mummuḍicōḷapuram (Kāḷahasti, Chittoor) states the exchange rate for ghee in gold equivalent, with nine *kuṛuṇi* of ghee equal to one *kaḷañju* of gold and fifteen *kalam* of ghee equal to twenty *kaḷañju*,[19] but records the price of curds in paddy (one and one-half *nāḷi* of curds purchased one *nāḷi* of paddy) and concludes with the note that seven *kalam* of paddy sold for one *kaḷañju* of gold.[20] The reason for the two systems of pricing, i.e., in gold and in paddy, may be indicated in the previously noted inscription from Tirumeynanam, Tañjāvūr, in which the inscription seems to state that gold was realized from the sale of paddy and rice, but that gold was the unit of exchange for other commodities is not specifically stipulated.[21] This inscription, the Tañjāvūr inscription, and the Mummuḍicōḷapuram inscription suggest that surplus rice was brought into the marketplace where it was sold for cash, the cash then being used to purchase either non-agrarian or luxury goods, or to be exchanged for other agricultural commodities.[22]

[18] SII, 2, 27, Rājarāja I, 29th year.

[19] See also 146 of 1912 (Tiruvoṛṛiyūr, Chingleput) where an inscription dated 1038 states that 50 *nāḷi* of ghee cost one *kaḷañju* of gold.

[20] 229 of 1904 (SII, 17, 328).

[21] 321 of 1910 (SII, 3, 90). A tax of one *nāḷi* of paddy was charged on each *kāśu* realized from paddy sales.

[22] This situation may be contrasted to that in Mughal times as described by

One is particularly impressed by the seeming uniformity throughout the Cōḷa heartland of the rice standard. A survey of inscriptions dating to the eleventh century reveals that one *kaḷañju* of gold was equal to sixteen *kalam* of paddy measured by the Rājakēsari standard at Tirumukkūḍal, Chingleput,[23] seventeen *kalam* at Cidambaram,[24] sixteen *kalam* at Tiruppugalūr, Tañjāvūr,[25] and fifteen *kalam* at Paṇḍāravāḍai, Tañjāvūr.[26] Some fluctuations of the rate may be seen in more remote areas, as at Kāḷahasti, Chittoor in 1012 when only seven *kalam* of paddy could be exchanged for one *kaḷañju* of gold.[27] The reason for this discrepancy is not evident. One can only speculate that there may have been a local difference in the unit of measure or that less rice was cultivated in the Kāḷahasti area, hence its higher price.[28] Inscriptions suggest that the supply of gold may have contributed to

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Irfan Habib in his book *The Agrarian System of Mughal India* (London, 1963), in which the Mughal government's requirement that taxes be paid in cash and not in kind forced farmers to sell part of their crop in the city for cash, which then went to the government tax collectors and was not used to purchase goods produced in the city. The Indian countryside, Habib argues, received nothing from the commercial centres in return for the various provisions the hinterland provided. Such a system of exploitation was not the case in early medieval south India as there is considerable evidence that the agricultural community was not exploited but benefited from the activities of commercial centres.

[23] 182 of 1915, Vīrarājēndra.

[24] 118 of 1888 (SII, 4, 223), Rājēndra I.

[25] 68 of 1928, Rājarāja I.

[26] 232 of 1923, Rājakēsarivarman.

[27] 299 of 1904 (SII, 17, 328).

[28] Cōḷa inscriptions record standards of measure which were named in honour of Cōḷa kings, as the *Rājarājan-kāsu-niraikaḷ* which was the standard for testing the weight of gold at Tiruvārūr near Nāgapaṭṭiṇam in Rājēndra I's reign (680 of 1919), the *Parakēsarikkaḷ* standard for testing gold in various areas of the Cōḷa domain in the same reign (190 of 1920), and the liquid measure *Rājakēsari* (149 of 1942–43). One inscription recording the testing process included the statement that gold had the proper impress and weight, suggesting that a seal or stamp was applied—possibly the tiger impress which is found on Cōḷa copper plates and which was also said to have been given goods passing through Cōḷa ports—which guaranteed the quality of the gold (*loc. cit.*). The importance of establishing a legal unit of measure is shown in an inscription from Rājarāja I's reign when as a result of measuring paddy by the *Viḍaividaṅgan* instead of the *Rājakēsari* standard a surplus remained (21 of 1922; see *Colas*, pp. 613–27, for a discussion of Cōḷa weights and measures). By establishing the value of goods by a legal standard of measure it would have been easier for merchants to determine a fair price in trade negotiations and was probably a critical factor in trade negotiations between local and itinerant merchants.

such a price variance, although it is likely that the price of rice was more subject to fluctuation and gold offered a more stable exchange standard. In two inscriptions from Tirumukkūḍal, Chingleput, one states that in 1015 one *kaḷañju* bought thirteen and one-third *kalam* of paddy[29] while the second records that in Vīrarajēndra's reign (1063–1069) the same amount of gold purchased sixteen *kalam* of paddy.[30] At the end of Kulōttunga I's reign in the early twelfth century thirteen *kalam* of paddy sold for only one *kāśu* (two *kāśu* equated to one *kaḷañju*) in the Tañjāvūr area.[31]

Since the inscriptions give the distinct impression that local prices were not subject to significant fluctuations, one must ask how these rates were established and if, as seems the case, they were closely supervised—if these prices were fixed by local merchant groups or whether prices were set via negotiation among local institutions which held administrative jurisdiction over a market. For instance, an inscription from Arakaṇḍanallūr, South Arcot, suggests that local markets were governed by a set of laws.[32] This inscription reports that due to a period of famine local residents had sold their local house sites and had gone off to other places. As a result the community's assembly redistributed twenty-five shares in the village to new persons on the condition that no sale or barter of local production to outsiders was permissible. If anyone was found to have broken this rule he was said to be subject to a fine of sixty-four *kaḷañju* of gold and in addition lost his local right to land possession.

To deal in such a local market external merchants would have been forced to negotiate through local institutions. Thus it is not unusual to find references to merchants, who were given a local monopoly in certain specified commercial commodities. We may note, for instance, an agreement by the regional assembly (*nāḍu*) of Kōṇāḍu selling the authorized brokerage (*taragu*) in betal leaves to two itinerant merchants, who were the only merchants allowed to transport betel leaves into that area.[33] Such trade may be seen as being built

[29] 176 of 1915.

[30] 182 of 1915.

[31] 44 of 1891 (SII, 4, 445). An inscription from Tiruppanandāḷ, Tañjāvūr (46 of 1914) informs us of the standards of metal equivalence: one *kaḷañju* of gold was said equal to two *kāśu*; bronze sold at 35 *palm* per *kāśu*, 30 *palam* of copper equated to one *kāśu*, 26 2/3 *palam* of silver equalled one *kāśu*, and 70 *palam* of tara (an alloy) was worth one *kāśu* of gold.

[32] 151 of 1934–35.

[33] *Inscriptions of the Pudukkottai State* (henceforth IPS), no. 125.

around a series of networks in which local institutions, representing their local communities, formed alliances with external merchants. Trade between such different communities was potentially explosive. Itinerant merchants were often regarded, and probably with good reason, as armed robbers. For example, an inscription from Kāṭṭūr, Chingleput, notes that itinerant merchants sometimes extracted trade by force, threatening people with drawn swords, capturing them, or depriving them of their food.[34] Trade was a meeting of two people who owed each other nothing and a misunderstanding could well have led to such violence.

Market Administration

Major Cōḷa inscriptions of the tenth and eleventh centuries which record royal communication are usually addressed to the members of the various local assemblies of that period, who are categorized into four groups:

1. *Nāṭṭār*
2. *Brahmadēyak-kiḷavar*
3. (a) *Dēvadāna*
   (b) *Paḷḷiccandam*
   (c) *Kaṇimuṟṟūṭṭu*
   (d) *Vēṭṭappēṟḷū-ūrkaḷilār*
4. *Nagaraṅkaḷilār*[35]

Nāṭṭār identifies the members of the *nāḍu* assembly, the regional unit of political administration in that time;[36] the second category

[34] 256 of 1912.

[35] 'Larger Leiden Grant of Rājarāja I' (AD 1006), *Epigraphia Indica* (EI), 22, 34, p. 243, In. 2–4; 'Tirumālpuram Inscription of Uttamacōḷa' (AD 984), SII, 3, 142, In. 2–8; 'Anbil Plates of Sundara Cōḷa' (AD 960), EI, 15, p. 64, In. 124; SII, 3, 205, p. 402, In. 2–5.

[36] See S. Subbarayalu, *Political Geography of the Chola Country* (Madras, 1973). Subbarayalu suggests that local village assemblies, known as *ūr* (not to be confused with the *ūrkaḷilār* of these inscriptions) were represented in a *nāḍu* assembly by prominent landholders who are identified with the terms *veḷḷān-vagai* or *araiyakal* and also as the *nāṭṭār*, the members of the *nāḍu* assembly. It is possible that these *nāṭṭār* were members of the *vēḷḷāḷa* community who were later considered the 'peasant elite' of the Tamil country or similar 'dominant caste' groups in other areas. See Subbarayalu, pp. 34–8, and Burton Stein, 'Integration

SCALE:
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Cinnar
Vālikaṇḍapuram
Gaṅgaikoṇḍacōḷapuram
River
Kañjānagaram
Singalandapuram
Ūṭṭattūr
Mēḷappaluvūr
Mānambaḍi
Tiruviḷakkuḍi
River
Kollidam
Tiruviḍaimarudūr
Tirunāgēsvaram
Śivapuram
Tiruppaṅgīli
Tillaistanam
Arayapuram
Tiruppālatturai
Ambār-
Tirumāgāḷam
Tiruppalanam
Kaveri
Uyyakkoṇḍān-
Tirumalai
Kaṇḍiyūr
Tiruvēdikkuḍi
Tirukkaṇṇapuram
Venṛaru River
Tiruvārūr
Tañjāvūr
Kōvilveṇṇi
Nāgapattinam
Vallar River
Mannārguḍi
Kuṉṉāṇḍārkōvil
Tiruttengūr
Koḍumbāḷur
Nārttāmalai
Agniyaru River
Kariyāpaṭṇam
Kuḍumiāmalai
Kōvilūr
Vellar River
Vēdāranyam
BAY OF BENGAL

recognized the representatives of the *brahmadēya* communities, those villages dominated by Brahmins;[37] while the fourth group was composed of the representatives of the *nagaram* assemblies, the administrative assemblies of regional marketing centres. That the third group may be considered as one is indicated in the inscriptional phrase in which the last component, *urkaḷilār*, qualifies each of the preceding members and does not of itself denote a separate member of the group.[38] This third category designated the representatives of those who lived in *devadāna*, villages which had been endowed to a Vaisnava or Saivite temple, *paḷḷiccandam*, villages endowed to a Jain or Buddhist temple, and *kaṇimuṟṟūṭṭu* and *vēṭṭappēṟṟu*, villages assigned to specific individuals as service tenures.[39] As opposed to this third category of communities whose revenue collections were essentially designated for religious purposes or to support some individual, the other three seem to have had more significant administrative responsibilities. In particular these three institutions were held responsible for the collection of local revenue cesses which were payable to the Cōḷa king and in most instances each made a direct revenue settlement with the king's revenue officials.[40]

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of the Agrarian System of South India,' in Robert E. Frykenberg, ed., *Land Control and Social Structure in Indian History* (Madison, 1969), pp. 173–215.

[37] See Noboru Karashima, 'The Power Structure of the Chola Rule,' *Second International Conference Seminar of Tamil Studies* (Madras, 1968), pp. 233–8, and Burton Stein, 'Brahman and Peasant in Early South Indian History,' *Adyar Library Bulletin*, XXXI–XXXII, 1967–8, pp. 229–69. Stein argues that unlike the theoretical notion of Brahmanical law which usually interprets the conferring of special rights and privileges upon groups of ritual specialists as great gifts (*mahādāna*) of great kings, in southern India many *brahmadēya* owed their origin to local elites as part of a Brahmin-dominant peasant alliance. In Stein's analysis south India *brahmadēya* are defined as units of land management consisting of Brahmin settlements exercising both fiscal and ritual authority over supportive clusters of peasant villages.

[38] The phrase ending in *ūrkaḷilār* may thus be translated as 'those who live in *dēvadāna*, *paḷḷiccandam*, *kaṇimuṟṟūṭṭu*, and *vēṭṭappēṟṟu* villages.' All four are types of revenue grants in which the right to a designated share of a certain land's production was transferred to the assignee.

[39] 'Larger Leiden Grant', EI, XXII, no. 34, p. 231.

[40] A very important difference between the legal texts and their application in southern India is the notion that *brahmadēya* should be free from all taxes. Cōḷa inscriptions clearly indicate that, like other indigenous village institutions of this period, the *brahmadēya* were responsible for the collection of certain tax revenues for the Cōḷa government. See Noboru Karashima, 'Allur and Isanamangalam, Two South India Villages of Cōḷa Times,' *First International Conference Seminar*

Our interest is in the *nagaram*, an institution which appears to have exercised administrative jurisdiction over important commercial centres of the Cōḷa hinterland and was held responsible for the collection of fees on shops (*aṅgāḍikuli*, *aṅgāḍippaṭṭam*) and bazaars (*kaḍai-iṛai kaḍaippaṭṭam*)[41] and often collected agricultural cesses on surrounding lands as well.[42] *Nagara*, using the Sanskrit form of *nagaram*, are described in ancient Indian literature as fortified cities of the interior which served as centres of government and commerce. The *Arthaśāstra*, the north Indian treatise on statecraft, indicates that administrative responsibility over a *nagara* was held by a 'City Superintendent,' whose job did not encompass jurisdiction over trade.[43] *Nagara* trade was administered by a 'Supervisor of Markets,' whose chief responsibility according to the *Arthaśāstra* was to keep merchants and artisans from cheating their customers.[44] In comparison, we do not encounter a similar jurisdictional separation between city administration and the administration of the market in the inscriptions which record the activities of the south Indian *nagaram*. In its south Indian context, *nagaram* designated a commercial area as distinct from agricultural communities such as *ūr* and *brahmadēya*. As *brahmadēya* were governed by a *sabhā* assembly and *ūr* were governed by an *ūr* assembly,[45] the *nagaram* also held certain delegated rights of administrative autonomy. The *nagaram* assembly, which according to Cōḷa epigraphy was composed of local merchants,[46] generally functioned as one among several assemblies of an urban area, though it sometimes existed as the only assembly in important regional trade centres. Inscriptions inform us that various merchants, artisans, 'those who work for hire,' as well as 'plowmen' were subject to a *nagaram*'s authority.[47]

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of Tamil Studies (Kuala Lampur, 1966), pp. 426–36.

[41] SII, 3, 90; 5, 597; 4, 223; 8, 252, 288; 1, 59, 11, 62; 7, 912.

[42] 388 of 1939–40; IPS, 170; SII, 1, 40. The author has discussed the indigenous evidence of the administrative functions of a *nagaram* at length in Kenneth R. Hall, 'The *Nagaram* as a Marketing Center in Early Medieval South India,' unpublished Ph.D. dissertation (Ann Arbor: University of Michigan, 1975).

[43] *The Kautilīya Arthaśāstra*, trans. R.P. Kangle (Bombay, 1963), 2, 36.

[44] Ibid., 4.2.

[45] See Karashima, 'Allur and Isanamangalam . . . '

[46] 118 of 1888 (SII, 4, 223), 308 of 1913 (SII, 12, 154), 297 of 1904 (SII, 17, 326). Four types of merchants, *viyāpārigal*, *cāliyar*, *saṅkarapāḍiyar* and *vāṇiyar* are identified as members of *nagaram* assemblies.

[47] 118 of 1888 (SII, 4, 223), SII, 1, 40.

As depicted in contemporary epigraphy, the most important function of a *nagaram* was the administration of its local market. That the *nagaram* dominated important regional markets may be seen in their control over fees levied on commercial transactions. For instance, each load of paddy brought into the *nagaram* of Mummuḍicōḷapuram (Kōvilūr, Tañjāvūr) was subject to three cesses: some rice was taken as payment for service (*nilakkūli*), a fee was collected for police protection (*paḍikāval*), and the *nagaram*'s right (*kaivāśi*) to receive a percentage of those goods sold in the local market was exercised.[48] Similar fees for usage (*ciṟṟūrāṭci*) were collected from both local and foreign merchants who 'sold at a profit' in the market at Iraviskulamāṇikkapuram.[49] In these examples and others the local *nagaram* had attracted traders into its marketplace by providing services normally associated with a city government such as police protection, street cleaning, garbage collection, etc., and had charged merchants for these services.[50]

A *nagaram* seems to have become an important commercial centre because it was able to link surrounding villages into a community of exchange in which it monopolized its own sphere of interest. We would speculate that the *nagaram* was a member of the local social system and was regarded as the natural sector within this society where certain types of commercial transactions could be negotiated. The *nagaram* would have been recognized for its expertise in commercial affairs; it served the local community by connecting their own commercial zone to others.[51] Trade with foreign merchants was thus transacted in a designated market, i.e., *nagaram*, at the extreme edges of the social nucleus where its more harmful effects could be contained.

One may show that this was the case by mapping the distribution of *nagaram* in the Cōḷa domain. This we have done for Cōḷamaṇḍalam,

[48] 204 of 1908.

[49] 213 of 1904 (SII, 17, 235).

[50] Although there is little evidence of the daily expenditures of a *nagaram* we may speculate that local tax cesses and other *nagaram* income would have been utilized to pay for urban services. Inscriptions do record that *nagaram* regularly employed clerks, accountants, and overseers [285 of 1959–60; 83, 84, 86 of 1889 (SII, 3, 15, 16, 18); IPS, 112]. Other employees of a *nagaram* would have included sweepers, policemen, and market officials.

[51] See, for example, 77 of 1906, where a merchant who was probably associated with the Tirunāmanallūr, South Arcot *nagaram* was active in the Tiruviḍaimarudūr *nagaram*'s market.

the Cōḷa heartland. Using those inscriptions which make clear reference to the existence of a *nagaram* at a specified place, one definite pattern of distribution becomes perceptible: that there was a maximum of one *nagaram* per *nāḍu* in Cōḷa times.[52] If, as has been argued in recent studies of regional administration under the Cōḷas,[53] the *nāḍu* was the most important regional political unit during these times, then we may suggest that it is more than coincidence that there was only one *nagaram* per *nāḍu*.

In his article 'Marketing and Social Structure in Rural China,' G. William Skinner speculated that 'central places are readily analyzed on the assumption that the economic function of a settlement is consistently associated with its position in marketing systems which are themselves arranged in a regular hierarchy'.[54] Establishing what he believed to be the traditional hierarchy of the Chinese rural marketing system, Skinner mapped communities of exchange, market towns, and their dependent territories.[55] He then overlaid contemporary units of government administration to establish relationships between marketing structure and government.

[52] I have used Subbarayalu's map of *nāḍu* boundaries in Cōḷamandalam as the basis for my survey. The pattern of one *nagaram* per *nāḍu* is consistent except in one instance where a *nagaram* was associated with two separate *nāḍu* at different times (indicating that *nāḍu* boundaries were subject to change over time) and in another case where a second *nagaram* was established much later than the first. In this second case the fact that dated references to the two *nagaram* do not overlap probably indicates that the second replaced the first as the *nāḍu*'s *nagaram*. While my map of *nagaram* in Cōḷamandalam accompanies this article, my supporting tables and maps showing *nāḍu* boundaries appear in Hall, 'The *Nagaram* as a Marketing Center.' Inscriptions from Pāṇḍimaṇḍalam and Tōṇḍaimaṇḍalam, the regions south and north of Cōḷamandalam, indicate a similar pattern of one *nagaram* per *nāḍu* in the remainder of the Cōḷa domain during these times.

[53] Subbarayalu, op. cit.

[54] G. William Skinner, 'Marketing and Social Structure in Rural China,' *Journal of Asian Studies*, XXIV, no. 1, 1964, p. 5. The three parts of this article have recently been republished together by the Association for Asian Studies, Ann Arbor. Skinner demonstrated that when the central government attempted to restructure the traditional hierarchy of rural markets in Szechwan, the normal flow of trade was disastrously disrupted and that only when the old market structure was restored was the orderly movement of agricultural products to urban centres restored.

[55] Skinner's analysis suggests that a peasant could walk only a limited distance to reach a market in the nineteenth century—about six to ten miles—which Skinner then applied to his mapping of regional economic units.

In Skinner's analysis market towns are seen as the economic centre for a group of approximately fifteen to twenty-five villages. This 'cell' was an autonomous economic system with its own transport, trade, artisan, industry, and credit mechanisms, and was organized spatially and temporally as a network of periodic markets. This economic system also constituted the social world of the area's inhabitants, as marriage networks, voluntary associations, and clientage relationships usually corresponded to the dimensions of the marketing area. Marketing centres drew to their centre of social action the representatives of village households from throughout the system, facilitating the homogeneity of the local cultural unit as well as minimizing external contacts and thereby fostering cultural isolation and differentiation. Skinner's argument suggests that the cohesive nature of this local marketing system became an asset to the local domain in times of political crisis as the village networks, which were less tolerant of deviation and suspicious of foreign elements, easily withdrew their participation in external exchange networks and fell back upon their ability to sustain themselves economically.

The distribution of the *nagaram* in the Cōḷa domain, as well as supporting epigraphic evidence, suggests that the south Indian *nagaram* functioned similarly to Skinner's market centres, serving a series of local villages by connecting them to the upper levels of a developing marketing system.[56] In the early Cōḷa period, especially, certain constraints seem to have been imposed on overland trade which prevented the commercial penetration of itinerant traders below the *nagaram* level.[57]

This does not mean that the commodities exchanged by itinerant merchants did not reach local villages. Rather, itinerant merchants did not reach local villages. Rather, itinerant merchants participated in exchange at the designated *nagaram* of an area. Here local merchants acquired the commodities offered for sale by the itinerants, which they, in turn, exchanged within the subordinate marketing network of the *nagaram*. The *nagaram*, we would speculate, acted as a centre for wholesaling where merchants negotiated the exchange of locally pro-

[56] An inscription from Tiruppaccūr, Chingleput, for example, suggests that twenty-four *nagaram* were associated with Kāñcipuram's *nagaram* (120 of 1920).

[57] Inscriptions stipulate that foreign merchants were to be subject to very specific regulations—in most cases more than those imposed on local merchants. The inscription from Arakaṇḍanallūr cited above, for example, goes so far as to forbid all external exchanges (151 of 1934–35).

duced commodities for either commodities which were not locally produced or for cash.[58] Even within the *nagaram* market it would have been uncommon for itinerant merchants themselves to participate in the marketplace, although they supplied goods of foreign origin to local merchants. Itinerant merchants seem to have been wholesale specialists who dealt primarily with other merchants. Locally based merchants acquired goods from these itinerants at wholesale in a *nagaram* and then sold these goods at retail within the various village markets of their marketing region. An example of this process is provided in the Kōṇāḍu inscription cited above in which the *nāḍu* conferred the brokerage in betel leaves upon two itinerant merchants.[59] These two itinerants were the only merchants authorized to sell betel leaves at wholesale to local merchants. Locally based merchants would therefore have acquired betel leaves from these two merchants, and would then have retailed this commodity within the various village markets of their *nādu*.

A key figure in this process was a *nagaram* merchant who acted as the local broker in specified commodities. Within the local marketing system they, rather than externally based itinerant merchants, made certain commodities available to village merchants. This these *nagaram* merchants did at the same time they were acquiring commodities of local production which they would, in turn, sell in the *nagaram*'s market. An inscription from Kāñcipuram, for instance, records that each year a brokerage (*taravukoḷ*) in some commodity (probably rice) was sold to a merchant who was likely authorized by the local *nagaram* as the legitimate wholesaler in that commodity.[60] Another inscription states that the *nagaram* Edirilicōḷapuram (Kuḷikkari, Tañjāvūr) controlled various local brokerage fees (*taragu*) which it presumably levied on *nagaram* wholesalers.[61] Thus, as we have noted above, inscriptions recording commercial activity in a *nagaram* make frequent reference to the exchange of surplus rice. This surplus rice was brought into the *nagaram* market by local wholesalers who then used the proceeds from the rice's sale either to purchase non-agrarian or luxury goods, or to acquire other agricultural commodities which they could then peddle to the village markets they serviced. The *nagaram*

[58] Thus, as we have noted above, inscriptions recording commercial activity in a *nagaram* make frequent reference to the exchange of surplus rice.

[59] IPS, 125.

[60] Who sold this brokerage is not clear 54 of 1893 (SII, 4, 867).

[61] 82 of 1911.

may thus be compared to the intermediate markets in Skinner's analysis: a *nagaram* was a designated centre of exchange where itinerant and local commercial networks intersected.

Criticism of Skinner's model has been based on the suggestion that itinerant merchants, who likely had the goods a community needed, could penetrate his neatly drawn marketing regions, withdrawing the necessity of dependence by local peasants on a specific market. In medieval south India the ability to deal directly with the sources of supply would have eliminated the problem of facing the rules and cesses of the *nagaram*. Why, then, was it necessary for the itinerant merchants to deal with the *nagaram*? It is our impression that the local political structure prevented this penetration of non-local peoples. Above all else, the *nagaram*, as part of the *nāḍu*'s political structure, dominated the marketing operations of its hinterland such that it was not worth their while for external merchants to deal directly with the local villages.[62]

Interaction between the *nagaram* and the *nāḍu* (*kūṟṟam*, *kōṭṭam*) administration is especially noticeable in contemporary epigraphy, suggesting that a special relationship between these two institutions was the key to a *nagaram*'s prosperity. We may cite, for instance, a joint resolution of the *nāḍu* and *nagaram* assemblies which was made at Tiruppaḷanam, Tañjāvūr, transferring dues collected from farmers as well as duties levied on commercial products such as pepper, areca-nuts, bales of cloth, and bags of rice to the local temple.[63] In *Kōṇāḍu*, as we have noted above, it was the members of the local *nāḍu* assembly who authorized the brokerage (*taragu*) for all betel leaves brought into Konadu.[64] In another community the *nāḍu-kaṇkatci*, an overseer employed by the local *nāḍu* assembly, and the *nāḍu*, a *nāḍu* revenue collector, approved a decision by twelve merchant families to support a festival honouring the Cōḷa king Rājarāja I.[65]

At Jambai, South Arcot, the *nagaram* and *nāḍu* representatives

[62] We are particularly impressed with the *nagaram*'s dominance over the exchange of local commodities for goods coming from outside the local marketing area. Although there are numerous references in contemporary epigraphy to the usual commercial commodities such as pepper, cotton, various cloth goods, and oil, the *nagaram* seems to have in particular dominated the exchange of grain commodities—i.e., the products of local agriculture.

[63] 187 of 1928.

[64] IPS, 125.

[65] 274 of 1910.

met together to judge several legal cases. In one the tribunal determined that a *nagaram* merchant could not be prosecuted for stabbing to death a visiting merchant who seems to have been associated with the Tirunāmanallūr, South Arcot *nagaram*[66] and had attempted to rape the local merchant's concubine. To soothe the feelings of the *nagaram* of the deceased, the offender was directed to combine with a relative of the merchant he had murdered in making an endowment in honour of the deceased to the local temple.[67] At Aragalūr, Salem, the *nāḍu* assembly arbitrated a potentially disruptive conflict, stepping in to resolve a serious dispute between the local *nagaram* and another group of merchants over the proper management of temple business.[68] The *nāḍu*'s involvement in *nagaram* affairs is particularly perceptible in an inscription from Ūṭṭatūr, Tiruchirapalli where the *nāḍu* and *nagaram* met to convert a local village into a 'merchant town' and therefore renamed it Tayilunalapuram.[69] Similarly in Uttaramērūr we find evidence of a merchant community inhabiting a quarter known as Nāḍuvilaṅgāḍi, 'the market area of the *nāḍu*.'[70]

Seemingly not only the *nagaram*'s marketing position would have been challenged by the penetration of external merchants into the hinterland, but also that of the local landholding elite, the *nāṭṭār*, whose monopoly over local production would have been endangered as well. Our suggestion is that it was the indigenous administrative institution known as the *nāḍu* rather than a centralizing government which originally integrated the *nagaram* into the political system of southern India by making it the community's representative in external commercial dealings. If, as recent historians have argued,[71] the *nāḍu* assembly was the representative body of the most powerful landholders in the regional political unit, then the relationships between the *nagaram* and this local elite, as symbolized in their considerable interaction, may well suggest that the *nagaram* was given a commercial monopoly over the *nāḍu*'s production and was the authorized arena for the wholesaling of the local *nāḍu*'s production to outside merchants. As shown in the inscription from Arakaṇḍanallūr cited above, a local institution such as the *nāḍu* was quite capable of legally

[66] 77 of 1906 and 225 of 1939–40.
[67] 77 of 1906. One should note the weak legal position of the visiting merchant.
[68] 432 of 1913.
[69] 521 of 1912.
[70] 52 of 1898 (SII, 3, 195).
[71] See Subbarayalu.

excluding itinerant merchants from local markets by forbidding local residents to transact business with them.[72] A *nagaram* would then have assumed a 'banker's role,' collecting, storing, and protecting local goods and utilizing them to conduct trade with itinerant merchants and other *nagaram*'s.

The Local Market and Itinerant Trade

It is the hypothesis of this study that the *nagaram* towns functioned as points of redistribution where certain commodities of foreign were made available for a local *nāḍu*'s consumption. These local economic networks in turn were serviced by itinerant trade groups who specialized in exotic commodities ranging from gems to elephants. Contemporary inscriptions categorized such groups as *samayam*, associations of long-distance traders who established permanent exchange relationships with the local economic systems and represented the local marketing networks within the larger system of Asian trade.

Among the south Indian *samayam* in Cōḷa times the *ticaiyāyirattaiññ ūṟṟuvar*, 'the five hundred merchants of the thousand directions,' was the most prominent; records of its commercial activities include inscriptions found in northern Sumatra and Pagan.[73] An inscription from Pirānmalai, Ramanathapuram, leads us to believe that *nagaram* were an integral part of the *ticaiyāyirattaiññūṟṟuvar* organization. This inscription, dating to late Cōḷa times, is unique in that it defines the membership of the *ticaiyāyirattaiññūṟṟuvar samayam*.[74] The inscription commences with a eulogy of the group and describes the organization's territory of operation as:

(a) the eighteen *paṭṭinam* (emporia) with their streets having terraced buildings as high as to touch the moon
(b) the thirty-two *vaḷarpuram* ('prosperous coastal towns')

[72] 151 of 1934–35.

[73] See K.A. Nilakanta Sastri, 'A Tamil Merchant Guild in Sumatra,' *Tijdschrift voor Indische Taal, Land and Volkenkunde*, LXIII, no. 2, 1932, pp. 314–27.

[74] 154 of 1903 (SII, 8, 442). The text has been translated and discussed in K.V. Subrahmanya Aiyar, 'Largest Provincial Organisations in Ancient India,' *Journal of the Mythic Society* (Bangalore), LXV, no. 4, 1954–5, pp. 270–86, and LXVI, no. 1, 1955, pp. 8–22. The interpretations of this inscription which appear in this study are, however, quite different than those of Subrahmanya Aiyar.

(c) the sixty-four *kaḍigaitāvaḷam* ('periodic market centres') which were inhabited by *cettis* (merchants) who flourished.

The *Arthaśāstra* clearly distinguishes commerce transacted in a *nagara* from that transacted in designated centres for international exchange, known as *paṭṭanam*.[75] Commodities of distant origin were apparently not a regular part of local commercial exchanges, as the *Arthaśāstra* suggests that when such goods came into *nagara* markets the 'Supervisor of Markets,' the official who administered *nagara* trade, had to call in the 'Director of Trade,' an expert in determining prices on such goods, who then fixed a price on commodities of foreign origin after calculating the investment, production, duty, interest, rent, and other expenses which contributed to the 'fair price' of such commodities.[76] This 'Director of Trade' was normally associated not with *nagara* administration but with that of the *paṭṭanam*.[77] He is specifically listed as an administrative subordinate to the 'Commissioner of Ports,' whose duty it was to set regulations for the port town.[78]

In the terminology of the *Arthaśāstra*, a *paṭṭana* was a 'port,' a place officially designated as a centre for the exchange of goods which arrived by boat or by caravan.[79] Such 'ports' were principally located either on sea coasts or on river banks of the interior, although in a broader sense *paṭṭanam* could also include major hinterland commercial centres which were visited only by merchant caravans. As we have noted above, the 'Director of Trade' was said to have been an expert in determining prices on commodities of distant origin, suggesting that such commodities were regularly exchanged in a *paṭṭanam*, and only rarely in the *nagaram*, whose trade was largely local.

In its south Indian context this broad definition of 'port' seems to have been somewhat modified. During Cōḷa times *paṭṭinam* was generally attached to the names of towns where international commerce was allowed, both port cities of the coast (*vaḷarpuram* in the Pirānmalai inscription) as well as important emporia of the hinterland. Itinerant merchants in some instances developed special relationships with major hinterland emporia and symbolized this relationship by the application of the distinctive title *eṛivīrapaṭṭinam* to the emporium's

[75] *The Kautilīya Arthaśāstra*, Book Two.
[76] Ibid., 4.2.36.
[77] Ibid., 2.16.
[78] Ibid., 2.28.2; 2.16.25.
[79] Ibid., 2.1.19; 7.12.21; 2.28.

name. Translation of this phrase reflects the commercial implications of such an arrangement: *eṛi*, 'the road'; *vīra*, 'heroes'; and *paṭṭinam* becomes 'a place where the heroes of the road conduct trade.' One such *eṛivīrapaṭṭinam* is described in an old-Kanarese inscription of the *Ayyāvoḷe* itinerant traders as 'a merchant-town situated in the centre and the first in importance among the twelve [towns] in the glorious Kūṇḍi Three-Thousand, adorned with villages, towns, and chief cities, with elegant mansions, palaces and temples . . . '[80] It is our impression that these *eṛivīrapaṭṭinam* assumed a commercial stance between the *nagaram*, which were primarily centres for the exchange of goods of local origin and were periodically involved in the exchange of foreign commodities, and the *paṭṭinam* (*vaḷarpuram*) of the coast, which were clearly centres for the exchange of foreign merchandise, a position which allowed *eṛivīrapaṭṭinam* to participate in both realms of commercial exchange.

As noted in the various inscriptions recording the activities of itinerant merchants, itinerants depended upon an assortment of relationships beyond the coastal ports to support their commercial activities. Their local presence may be characterized as of three types: (*i*) the itinerant merchants inhabited a specified and permanent quarter of a commercial centre; (*ii*) itinerant merchants' occasionally visited a community and were thus rightfully described as part-time residents; or (*iii*) itinerant merchant organizations incorporated local merchants into their membership as the local merchant became the itinerant organization's local trade representative.[81]

An *eṛivīrapaṭṭinam* provides a good example of the first type of relationship. As described in the Pirānmalai inscription a *paṭṭinam* was a place where people sang in the streets, the 'three kinds of Tamil' were spoken, all kinds of fruits, trees, and flowers grew, and all religious observances were properly performed—places which were not only centres of commerce but also of culture and were truly fit for merchant princes. In converting Kāṭṭūr, Chingleput, into an *eṛivīrapaṭṭinam* the *ticaiyāyirattaiññūṛṛuvar* organization dictated a set of rules to be followed by traders resident there.[82] Local inhabitants were exempted from all communal contributions and were to receive twice the privileges they used to receive. The general sense of this

[80] *Indian Antiquary*, 14, p. 25, In. 58 (AD 1182–83).
[81] See Kenneth R. Hall.
[82] 256 of 1912.

inscription is that the itinerant merchants would protect the commercial centre and usher the *eṛivīrapaṭṭinam* into a new era of peace and prosperity. The long-distance trade organization then acted as the agents for the local centre within a larger marketing network. In one such community itinerant merchants of one branch of the *ticaiyāyirattaiññūṛṛuvar* claimed *vaḷañjiyattiḷ-taṇi-ceṭṭum*, an exclusive right to trade in certain imported and exported goods.[83] This and other Cōḷa inscriptions suggest that itinerants were confined to certain types of merchandise—those of the export sector in particular—and did not compete with local merchants within the local marketing system.[84]

It is significant that inscriptions recording the activities of itinerant merchant organizations most often appear in communities which were governed by a *nagaram*. Interaction between an itinerant organization and a *nagaram*, for example, may be seen at Tiruviḍaimarudūr, Tañjāvūr, a *nagaram* town, where a big temple maṇḍapa was called *ticaiyāy-irattaiññūṛṛuvar* in honour of the *samayam* which had apparently financed its construction.[85] An itinerant group and local merchants of Vālikaṇḍapuram, Tiruchirapalli, received gold and supplied ghee as co-managers of an endowment for a temple lamp.[86] Similarly at Jambai, South Arcot, an itinerant group and local merchants supplied oil for a temple, two-thirds of the amount from the former and the remaining one-third from the latter.[87] At Tiṭṭaguḍi, South Arcot, an inscription records a gift by the *ticaiyāyirattaiññūṛṛuvar* merchants to the god and goddess of that *nāḍu* and *nagaram*.[88]

A most striking example of a *nagaram*'s relationship with a *samayam* is provided in a late Cōḷa inscription from Piḷḷaiyārpaṭṭi, Ramanathapuram. Here a *nagaram* named Rājanārayaṇapuram was formed on land which had been given rent-free by the *nāṭṭār* of that area[89] to the *nagaram* of Aiññūṛṛuvapperunderu in Eṇkārikkuḍi, which

[83] EI, 4, pp. 270–77, In. 7–8.

[84] This impression is supported by the fact that nowhere do we find inscriptional reference to itinerant merchants who paid for merchandise in grains, the most important commodity of exchange in local markets. Itinerant merchants seem to have always used metals and not paddy as their medium of exchange.

[85] 353 of 1907.

[86] 247 of 1943–44.

[87] 80 of 1906. This suggests that oil was imported into this community by itinerant merchants.

[88] 21 of 1903 (SII, 8, 291).

[89] Note the involvement of the *nāḍu* in this transaction both legitimizing and encouraging the establishment of the *nagaram*. As noted in this inscription the

had also purchased tenure rights over another community and its fields to support the new *nagaram*.[90] Similarly at Puṅganūr, North Arcot, an inscription records the name of a member of the *Ticaiyāyirat-taiññūṟṟu-nagaram* who had endowed money to have the village's lake cleared of encumbrances.[91] In both examples a *nagaram* owed its origin or had at least incorporated the name of the *samayam* into its own.

In this light the use of *tāvaḷam* in the Pirānmalai inscription is of particular interest. *Tāvaḷam*, as we have noted above, is a Tamil term used to denote a centre of trade where exchanges took place at periodic gatherings of traders, a place where travelling bands of merchants halted to exchange goods.[92] The Pirānmalai inscription seems to be defining the different levels at which itinerant merchants transacted trade and occupying the lowest level, according to the inscription, were the periodic markets or 'fairs' which were held at hinterland centres of exchange.

The Pirānmalai inscription lists eleven groups of *nagaram* members who inhabited places in Pāṇḍimaṇḍalam (the area encompassed in this inscription) which were classified as *paṭṭinam* (Keralasiṅgavaḷanāḍu Aruvimāṇagaram *alias* Kulaśekarappaṭṭinam *nagarattōm*), *ūr* (Turvārapatināḍu Eripadainallūr—Vadamaṭṭai *nagarattōm*, Tirukkoṭṭiyūr Maṇiyambalam *nagaratton*), *puram* (Keralasiṅgavaḷanāḍu Alahāpuram *alias* Ceḷiyanārāyanpuram *nagarattōm*, Pūramalaināḍu Puṭatteru *alias* Cēranārāyanapuram *nagarattōm*, Aiyapoḷilvaḷanāḍu Kaḷvayalnāḍu Sundarapāṇḍiyapuram *nagarattōm*), or *perunderu* (Kaḷvalināḍu Aḷakaimāṇagaram *alias* Jayaṅgoṇḍacōḷapperunderu *nagarattōm*, Maṇḍalikaṇ Kembirapperunderu *nagarattōm*).[93] The ninth group was described as the Kaḍaladaiyātilaṅgaigoṇḍacōḷa-vaḷanāḍu Uṛattūrkūṟṟam Koḍumballūr *mānigrāmam nagarattōm*, a group of itinerant merchants which was apparently encompassed within the

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nāttār would normally have received 'rent' from the new *nagaram*'s land.

[90] 150 of 1935–6.

[91] 13 of 1940–1.

[92] See K. Indrapala, 'South Indian Mercantile Communities in Ceylon, *c.* 950–1250,' *The Ceylon Journal of Historical and Social Studies*, New Series, 1, no. 2, 1971, p. 108.

[93] A *paṭṭinam*, as noted above, was a hinterland trade emporia; *ūr* was a common ending to village names; the *puram* ending was associated with many *nagaram*; and *perunderu* was used to identify one sector of a town. *Nagarattōm* is the first person plural of *nagaram* and may be translated 'we the people of the *nagaram*.'

larger organization.[94] The tenth group was said to have been comprised of twelve *nagaram*'s 'including the Jayankondacōḷapuram *nagarattōm*,' while the eleventh group included the Karuvūr, Kaṇṇapuram, Paṭṭāli, Talaiyūr, Rājarājapuram, Kiraṇūr, and several other *nagaram*'s of Koṅgu-maṇḍalam.[95]

Using this inscription and its tally to test our earlier hypotheses we may first note that only one *nagaram* per *nāḍu* unit is mentioned as each *nagaram* of Pāṇḍimaṇḍalam is catalogued in association with a different *nāḍu* or *vaḷanāḍu*.[96] We have speculated above that there was a close relationship between the *nāḍu* and merchant activity, particularly in terms of controlling external commercial contact with the local community of exchange. Supporting our position is the fact that the signatures to the Pirānmalai inscription include those who are stated to have represented each of the affected *nāḍu*'s and whose names conspicuously end with the designation—*vēḷār*, likely indicating that they were members of the *vēḷḷāḷar* landholding elite of that area. Such an alliance between *nagaram* and members of the local landholding elite, as we have suggested above, would have reinforced the *nagaram*'s local commercial monopoly and forced itinerant merchants to trade in the *nāḍu*'s authorized market.

Thus, we have argued that it was the *nagaram* which provided the arena for local commercial contact between local and itinerant merchants. The Pirānmalai inscription's reference to the three levels of itinerant activity, the *paṭṭinam*, the coastal ports (*vaḷarpuram*), and the periodic markets (*tāvaḷam*) of the hinterland, followed by its list of the specific *nagaram*'s with which the itinerant organization had contact, is a detailed account of the group's commercial activities.[97] While in the coastal ports and *eṛivīrapaṭṭinam*, as we have noted, itinerant merchants enjoyed a very special status, in the hinter land

[94] Inscriptions from Koḍumbālūr make reference to 'two types of *nagarattār* (third person singular or plural of *nagaram*)' as if there was a local *nagaram* and a separate community which could be identified as the base of operations for the Koḍumbālūr *māṇigrāmam*. See IPS, 82.

[95] Koṅgumaṇḍalam was located in the modern Coimbatore and part of Salem districts, west of Cōḷamaṇḍalam.

[96] A *vaḷanāḍu* was an artificial grouping of several *nāḍu* units. *Vaḷanāḍu* were created by the Cōḷas in an attempt to facilitate the more efficient collection of state revenues. See Hall.

[97] The formula of 18, 32, and 64 is in itself ambiguous and, as with other such formulas which are frequently in Indian epigraphy, probably was more symbolic than concrete.

their position was more dependent on forming alliances with local institutions as is symbolized by the specific references in the inscription to the *nagaram* assemblies with which the group interacted.[98] It should be expected, then, that except for the single designated *paṭṭinam* the named *nagarattōm* of this inscription inhabited *tāvaḷam* which formed the marketing cycle of the itinerant organization.[99]

Conclusion

The existence of such a marketing system allows us to conclude that supravillage levels of social integration were important in this period of south Indian history. Local, social and economic units, as represented by the *nāḍu* and *nagaram*, did not exist in isolation but were integrated into a system which articulated the distribution of agricultural and high-order commodities throughout the hinterland.[100] Itinerant traders, we have argued, connected the externally oriented high-order market centres, identified in the inscriptions as *paṭṭinam*, to *nagaram*, regional markets which served as the downward terminus for high-order 'foreign' goods and wholesaled locally produced commodities in return. While the origin of the *nagaram* may well have been due to practicality—such as a strategic geographical position—the continued prominence of the *nagaram* in Cōḷa times was reinforced by its ties to the indigenous political system, the regional unit of administration known as the *nāḍu*.

[98] This inscription notes that there were five 'assemblies of *ticaiyāyirattaiñ-ñūṟṟuvar* including one group which supervised or regulated the conduct of traders engaged in exports and imports who were settled principally in coastal ports and another group who engaged in trade with *nāḍu* and *nagaram*.

[99] This interpretation is supported by another inscription of the *ticaiyāyirattaiñ-ñūṟṟuvar* from Kōvilpaṭṭi, Tiruchirapalli, in which it is stated that the organization's local representatives were the *nagaram* of Sundaracōḷapuram *alias* Dēśiyugandappaṭṭinam, the Koḍumbālūr *maṇigrāmam*, and the *nagaram* of Teliṅgakulakālapuram *alias* Kulōttuṅgacōḷapaṭṭinam and Koṇṟaiyūr *alias* Uttamacōḷapuram (286 of 1964–5).

[100] Re-emphasizing our opening statements, the incomplete and fragmentary nature of our sources does not allow us to prove the existence of a Skinner style system of high order and low-order markets, although it is our belief that the presented evidence certainly suggests such patterns. The available inscriptions have not, for instance, allowed us to follow the exchange of specific commodities from their point of origin to the coastal ports.

We have suggested that itinerant trade in early medieval south India was conducted under 'partnership' agreements between *nagaram* and groups of merchants who periodically visited the *nagaram* to exchange high-order goods for locally produced commodities. During Cōḷa times, as the Pirānmalai inscription expresses so well, long-distance traders found it profitable to institutionalize such commitments. In the face of strong and administratively autonomous political and economic units like the *nāḍu* and *nagaram*, it was to the itinerant's advantage, we would speculate, to deal as a representative of an organized body. Membership in an itinerant merchant organization seems to have provided the basis for one's local economic status; in a similarway *nagaram* merchants were usually identified by their own *nagaram* when their activity took them elsewhere—as if this gave them an advantage in establishing a local trade relationship. The significance of a local commercial centre within this larger system depended on its ability to organize trade within its own community of exchange and to keep goods flowing to the authorized markets. Here locally produced commodities entered the commercial networks serviced by itinerant merchant associations. These itinerant organizations, in turn, kept goods flowing to the coastal ports where south Indian commodities entered the well-developed routes of Asian maritime trade.

Chapter Two

The Price Regulations of 'Ala'uddin Khalji—A Defence of Zia' Barani

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Zia' Baranī's long account of the price-control measures of 'Alā'uddīn Khaljī (1296–1316), running to nearly seventeen pages of the printed edition represents one of the most interesting portions of his work.[1] Some assessments of this account, it is true, have not been very complimentary to that historian. Moreland argued that Baranī's facts may be accepted but for no better reason than that he 'did not possess the power of economic analysis' necessary for 'the invention' of such facts.[2] Yet it is precisely the unexpected 'economic analysis' that is rejected in a recent authoritative work; it is 'necessary,' it has been said, 'to distinguish Baranī's facts from his conclusions'.[3] Now, Mr Simon Digby, having the advantage of tracking down an earlier version of Baranī's text would have us doubt the old writer's facts as well. 'Baranī's inaccuracies,' says he, 'are even more extensive than has hitherto been supposed.'[4]

[1] *Tā'rīkh-i Fīrūz-Shāhī*, Saiyid Ahmad Khan, W.N. Lees and Kabiruddin, eds. (Calcutta: Bib. Ind., 1860–2). All my references under 'Baranī' are to this edition. The portion dealing with prices appears on pp. 303–19. In S.A. Rashid's edition, vol. II (not formally published), the portion runs from p. 134 to p. 150. I have compared the two printed texts at important points with India Office MS 1.0.177177 (Ethe 211), transcribed in AH 1007/AD 1599 (microfilm in the Department of History, Aligarh).

[2] W.H. Moreland, *Agrarian System of Moslem India* (Cambridge, 1929), p. 16.

[3] *A Comprehensive History of India*, V (Delhi Sultanate), Mohammad Habib and K.A. Nizami, eds., p. 377. The chapter, Economic Regulations of 'Alā'uddīn Khaljī (pp. 372–91), is credited to the late Professor B.P. Saxena, but has marks of considerable editorial revision by Professor Habib.

[4] Simon Digby, *War-Horse and Elephant in the Delhi Sultanate* (Oxford, 1971), p. 36n.

In what follows I propose to argue, first, that Baranī's factual account is correct in all substantive matters; and, secondly, that, though the 'analysis' is his own, it is nevertheless sound and takes us much closer to the purpose, extent and consequences of 'Alā'uddīn Khaljī's measures than any other that has so far been offered.

I

A reader of Moreland's remarks might assume that if Baranī's work were not there, we would not have known of 'Alā'uddīn Khaljī's price measures; and that his account, therefore, is uncorroborated. This is by no means so. The measures provided Amīr Khusrau with yet another opportunity to insert panegyrics of his royal patron in the *Khazā'inu-l Futūḥ*, a work written in 1311 or soon after.[5] There is the rather unjustly neglected account in the *Riḥla* of Ibn Baṭṭūṭa, who was in Delhi from 1335 to 1342.[6] In 1350, 'Iṣāmī in his versified history, *Futūḥ-us Salāṭīn*, devoted a section to the same subject;[7] and Naṣīr-uddīn Maḥmūd, the Chishti mystic, spoke on it twice at some length in his conversations recorded in 1354–55.[8]

Baranī, who completed his *Tā'rikh-i Firūz-Shāhī* in 1357, could not of course have had access to the narrative of Ibn Baṭṭūṭa; and it is most unlikely that he could even have heard of 'Iṣāmī's versified history, prepared for a hostile court. Baranī does not give any indication of an acquaintance with Naṣīruddīn Maḥmūd's conversations, though he does mention the divine once.[9] It is, on the other hand, practically certain that as an educated man (and still more as a young friend of that poet) he must have read Amīr Khusrau's *Khazā'inu-l Futūḥ*; yet he does not seem to have used it directly in weaving his narrative of the military campaigns of 'Alā'uddīn Khaljī, for which chiefly the book should have served as a source. All in all, while we

[5] *Khazā'in al-Futūḥ*, Mohammad Wahid Mirza, ed. (Calcutta: Bib. Ind., 1853), text, pp. 16–17, 20–3, for price-control measures; see p. 166 for the last date, Jumada II, 711 (=18 October 1311) in the text.

[6] *Riḥla Ibn Baṭṭūṭa*, Karam al-Bustānī, ed. (Beirut, 1384/1964), pp. 429–30; tr. Mehdi Husain, *The Riḥla of Ibn Baṭṭūṭa* (Baroda, 1976), pp. 41–2. Ibn Baṭṭūṭa dictated the account of his travels in 1355 (text, p. 701).

[7] *Futūḥ-us Salāṭīn*, A.S. Usha, ed. (Madras, 1948), pp. 313–15; see also verses on pp. 301, 605. This work is henceforth cited by the author's name, 'Iṣāmī.

[8] *Khairu-l Majālis*, K.A. Nizami, ed. (Aligarh, 1959), pp. 185, 240–2.

[9] Baranī, 535.

can confidently say that all the four accounts we have mentioned are independent of Baranī, he, on his part, could not have seen two of these, and has probably not been influenced by either of the other two sources. Such independence should enable us to apply a simple test to check Baranī's veracity. If the facts that he offers us are largely manufactured out of his head, his account should be different in substantial particulars from what we get from our other sources, much briefer as they are. But if the reverse is true, that is, if his version matches with what these four sources tell us, he would stand vindicated, and there would be no reason to doubt the general veracity of his account. I, therefore, offer the following detailed comparison:

(*a*) Baranī gives the prices of a very large number of commodities current under 'Alā'uddīn Khaljī. Simon Digby has traced an earlier version of Baranī's work containing the prices of a fewer number of commodities.[10] The prices of foodgrains in both versions are identical with the exception of gram; in some other cases, the earlier version gives variant (possibly corrupt) quotations.[11] The question arises whether, when Baranī later altered and expanded these earlier quotations, he did so from his head or from documentary evidence. Fortunately, Naṣīruddīn Maḥmūd gives us prices fixed by 'Alā'uddīn Khaljī for wheat, and red and white sugar; and these can be compared with those which Baranī has recorded.

Naṣīruddīn Maḥmūd's prices are: 'Seven and a half *jītals*, (one *man* of) wheat; half *diram* (½ *jītal*), (one *ser* of) sugar; one *jītal*, somewhat less (than one *ser* of) white sugar (*shakar-tarī*).[12] Baranī gives the corresponding quotations in his final version as follows:

[10] Digby possesses in his collection (MS 57) a copy of the earlier version, and I am indebted to him for supplying me much information on this version. The version is also contained in the Bodleian Library, Elliot 353 (microfilm in the Department of History, Aligarh). I have used the latter MS, in which the portion relating to 'Alā'uddīn Khaljī's price-control measures occupies ff. 143a–44b. Since Digby has promised to offer a detailed study comparing the two versions (*Cambridge Economic History of India*, I, 1982, p. 26n), I have refrained from entering into a detailed discussion of the significance of the first version.

[11] Compare grain prices in Baranī, 305, with those in Elliot 353, f. 144a. In Elliot 353, rice is omitted, and gram is rated at 4 *jītals* per *man* instead of 5. Prices of sugar, ghee and sesame oil in Baranī, 310, may be compared with those in Elliot 353, f. 144a; the divergence is more marked here.

[12] *Khairu-l Majālis*, p. 185. On p. 241, however, the divine says the price of 'grain' had come down to '7 *jītals* per *man*'. For *shakar-tari*, as meaning white sugar, see Tek Chand, *Bahar-i 'Ajam*, s.v. I take *diram* to be a synonym for *jītal*.

'Wheat, one *man* for seven and a half *jītals*'; 'red sugar, three *sers* for one-and-a-half *jītals*'.[13] Thus wheat has the same rate; red sugar too is exactly half a *jītal* for one *ser*; and white sugar, at one *jītal* for 3/4 *ser*, suits the mystic's loosely stated price for it. The price quoted in Baranī's first version for wheat is the same, and that for white sugar (1 *jītal*, 1 *dāng*, i.e., 1¼ *jītals*, for one *ser*) is closer still to Naṣīruddīn Maḥmūd's price; the price for red sugar is not provided.[14] With such corroboration, it would be hard to say that Baranī has invented these prices, or set them down in his final version on the basis of just his memory or conjecture.

(*b*) Baranī stresses that 'Alā'uddīn Khaljī's ability to induct grain into the market from the Imperial store-houses was a major factor behind the prevention of a rise in grain prices when the rains failed.[15] This is in fact the sum and substance of Amīr Khusrau's statements on how the cheapness of grain was secured.[16] Ibn Baṭṭūṭa offers a more circumstantial account of this, approaching Baranī closely in that he also refers to the undoing of the engrossers (*muḥtakirūn*).[17] 'Iṣāmī has a simpler but fairly straightforward account of the same measures, crowned by an expression of satisfaction at the destruction of 'all the engrossers' (*har muḥtakir*).[18]

(*c*) Baranī describes in detail the steps taken to ensure that the grain-carriers (*kārvānīs*) maintained an unending supply of grain to the city and sell at prices fixed by the Sultan.[19] Though his account is given from a point of view opposite to that of Baranī, Naṣīruddīn Maḥmūd too ascribes the cheapness of the grain to the Sultan's success in managing the grain-carriers, whom he styles *nāyaks*.[20]

(*d*) According to Baranī, the cheapness extended to all other products, cloth of high and low grades, slaves, horses, etc., whose prices too were fixed; and the market for cloth, sugar and salt was placed on a piece of open ground called *Sarāi'Adl*.[21] Amīr Khusrau says that all kinds of cloth (and he too names various sorts) were put

[13] Baranī, 305, 310. MS 1.0.177/Ethe 211, however, reads one *jītal* instead of 1½ *jītal* for the price of 3 *sers* of red sugar; so also S.A. Rashid's text, 140.
[14] Elliot 353, f. 144a.
[15] Baranī, 305–6, 308.
[16] *Khazā'inu-l Futūḥ*, 21.
[17] Ibn Baṭṭūṭa, text, 430; tr., 42.
[18] 'Iṣāmī, 314.
[19] Baranī, 306–7.
[20] *Khairu-l Majālis*, 241.
[21] Baranī, 309–16; the account of *Sarāi 'Adl* is on pp. 309–12.

on sale at low prices in the *Dāru-l'Adl* (the name *Sarāi'Adl* is also deducible from a verse), as also 'fruits and all necessaries of the table.'[22] Ibn Baṭṭūṭa similarly speaks of the Sultan acting to lower prices of meat and Daulatābād cloth.[23] Very low prices for quilted coats made of different kinds of cloth prevailing in 'Alā'uddīn Khaljī's time were recollected by Naṣīruddīn Maḥmūd.[24]

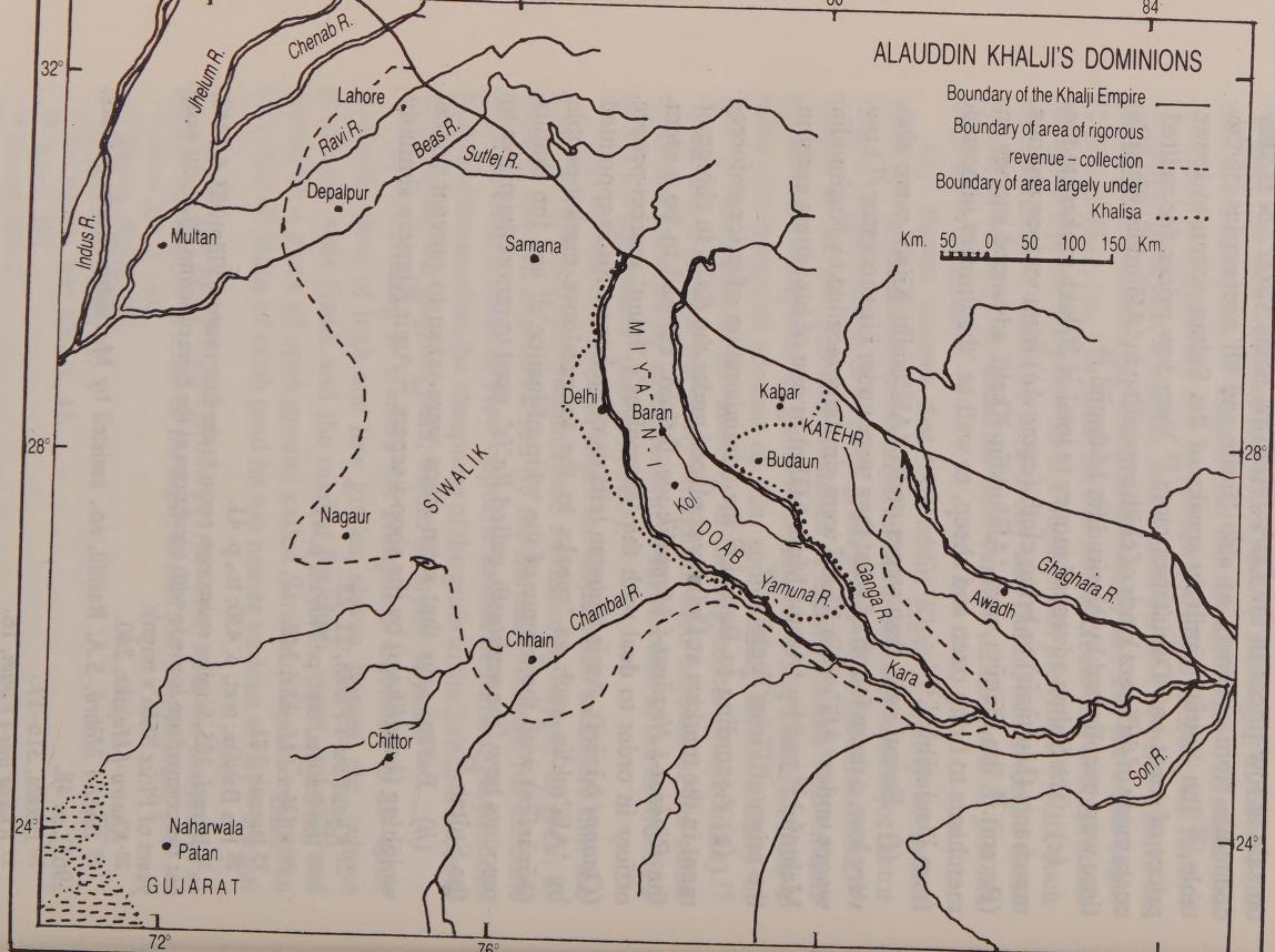
(*e*) The Sultan advanced money (a total of 20 lakh *tankas*) to the merchants (Multānīs) to bring cloth (*aqmasha*) from various regions (Baranī).[25] Ibn Baṭṭūṭa says 'Alā'uddīn Khaljī advanced money to merchants to bring oxen and sheep, as well as 'the drapery imported from Daulatābād'.[26]

(*f*) Baranī says that wages under 'Alā'uddīn Khaljī were also very low, a mere fourth of what they were under his successor.[27] Low wages under 'Alā'uddīn Khaljī were similarly recalled by Naṣīruddīn Maḥmūd,[28] and by 'Ainu-l Mulk Māhrū in one of his letters early in the reign of Fīrūz Tughluq.[29]

(*g*) According to Baranī,[30] the administration of price-enforcement in the markets at Delhi was placed under the *Ra'īs* in charge of the *Riyāsat-i Naẓārat-i Mamālik wa Iḥtisāb*. He had to be a stern officer in order to deal with the 'shameless', 'lying' market-people (*Qaum-i bāzārī*). Amīr Khusrau tells us of an honest *Ra'īs* appointed by 'Alā'uddīn such as 'speaks to the tongue-loose market-people (*bāzārīān*) with the tongue of the whip of justice';[31] and Ibn Baṭṭūṭa recounts how 'the *muḥtasib*, called *Ra'īs*', used to report the prices to the Sultan.[32]

(*h*) Baranī says that stern steps were taken to prevent underweighing (*kamdihagi*) by the shop-keepers.[33] Amīr Khusrau similarly

22 *Khazā'inu-l Futūḥ*, 21, 23.
23 Ibn Baṭṭūṭa, text, p. 340; tr., p. 41.
24 *Khairu-l Majālis*, 240.
25 Baranī, 311.
26 Ibn Baṭṭūṭa, text, p. 430; tr., p. 41.
27 Baranī, 385. Similar statements occur in the first version, Elliot 353, f. 144b, but the comparison is made with conditions at the time of writing (i.e., the early years of Fīrūz Shāh's reign).
28 *Khairu-l Majālis*, 240.
29 *Inshā-i Māhrū*, S.A. Rashid, ed., assisted by M. Bashir Husain (Lahore, 1965), p. 48.
30 Baranī, 316–17.
31 *Khazā'inu-l Futūḥ*, 16.
32 Ibn Baṭṭūṭa, text, pp. 429–30, tr., p. 41.
33 Baranī, 318–19.


ALAUDDIN KHALJI'S DOMINIONS
Boundary of the Khalji Empire
Boundary of area of rigorous revenue – collection
Boundary of area largely under Khalisa
Km. 50 0 50 100 150 Km.
32°
28°
24°
72°
76°
84°
Jhelum R.
Chenab R.
Lahore
Ravi R.
Beas R.
Sutlej R.
Indus R.
Depalpur
Multan
Samana
Delhi
Baran
MIYANA
Kabar
KATEHR
Budaun
Koil
DOAB
Yamuna R.
Ganga R.
Ghaghara R.
Awadh
Kara
Son R.
SIWALIK
Nagaur
Chhain
Chambal R.
Chittor
Naharwala
Patan
GUJARAT

tells us of stern punishments for this offence; he adds that iron weights were ordered to be substituted for the stone weights.[34]

(*i*) Baranī says that prices in the grain market were daily reported to the Sultan,[35] and the Sultan was concerned 'day and night' with the fixation of the prices of almost everything.[36] Ibn Baṭṭūṭa tells us of the report on prices being daily laid before 'Alā'uddīn Khaljī;[37] and so too 'Iṣāmī:

> From the market every day at sunset,
> The reporters (*barids*) brought the rates of grain prices;
> All those rates were laid before the King,
> One by one, every evening.[38]

Given the brevity of the other sources from which we have sought to verify Baranī, we could hardly have expected a more extensive corroboration. Indeed, if one were to set aside Baranī and reconstruct a picture of 'Alā'uddīn Khaljī's price regulations by simply assembling the other four early accounts, we would still get a considerable part of the skeleton, and a few of the many details, of Baranī's spirited description. The essential merit of our other sources would, indeed, seem to lie in the service they perform of confirming so much of Baranī's factual narration that we can safely repose confidence in the general truth of his whole account, including the part that the other four sources have failed to shed light on.

II

Baranī goes much further than merely giving us a detailed narrative whose general reliability we may accept: he has a critical acumen, which the other sources so woefully lack. All the four of them simply attribute the measure to the benevolence of the Sultan who wished to serve the common weal. Of this supposition Baranī was quite sceptical; but this may be better discussed at a later stage in this article. As for the practical measures by which the control was achieved. Amīr Khusrau, Ibn Baṭṭūṭa and 'Iṣāmī can only tell us of the opening up of

[34] *Khazā'inu-l Futūḥ*, 16–17.
[35] Baranī, 308.
[36] Baranī, 316.
[37] Ibn Baṭṭūṭa, text, pp. 429–30, tr., 41.
[38] Iṣāmī, 315.

Imperial store-houses,[39] while Naṣīruddīn Maḥmūd, with partial support from Ibn Baṭṭūṭa, focuses on the Sultan's policy of advancing loans to merchants so as to enable them to bring supplies to the market.[40]

In his first version, Baranī remains, on the whole, among the uninquisitive, with none of the analytical powers and attendant details of the final text. In between the two versions, then, he must have reflected. Sure enough, he too describes, and in detail, the use of imperial stores (see (*b*) in Section I) and the management of grain-carriers to ensure steady supplies (see (*c*) in Section I). But we can see him asking himself further questions, to wit: (*i*) How were the Sultan's grain store-houses so full that they had enough within them to replace normal supplies whenever these failed in bad seasons? And (*ii*) of what avail would it have been for merchants to be assisted or coerced to bring in supplies, if they had to buy dear in order to sell cheaply, and so to proceed all the time at a loss? Any aid or constraint to sustain so profitless an undertaking would have collapsed: it could only succeed if grain were also made cheaper where it was raised; but how?

Baranī's answers to both these questions are rooted in his description of 'Alā'uddīn Khaljī's land-tax policy.[41] There he says that 'Alā'uddīn Khaljī exacted half the produce as tax (*kharāj*) from every cultivator, measuring the land (*masāḥat*) and imposing on it the officially estimated grain-rate (*wafā*). In addition, he imposed a tax called *charāī* on milch cattle and *gharī* on every house or hut.[42] The tax-demand was high, and harsh measures were undertaken to see that there was no holding back of grain (*ghaban*) or uneven spread of taxation (*shutrgurba*).[43] The result was that the rural intermediaries—the *khūṭs* and *muqaddams*—were greatly impoverished, a point which Baranī underscores.[44] In other words, at the expense of the peasantry and the higher rural classes, 'Alā'uddīn Khaljī obtained half the agri-

[39] *Khazā'inu-l Futūḥ*, 21; Ibn Baṭṭūṭa, text, p. 430, tr., p. 42; 'Iṣāmī, 314.

[40] *Khairu-l Majālis*, 241; Ibn Baṭṭūṭa, text, p. 430, tr., p. 41.

[41] Of the four causes of the success of 'Alā'uddīn Khaljī's price-control mesures, Baranī puts, as the second, 'the heavy magnitude of the land-tax (*kharājhā*)' (Baranī, 321).

[42] Baranī, 288. The term *wafā* is explained by its use in 'Afīf, 180, as pointed out by Moreland (226). See T. Raychaudhuri and I. Habib, eds., *Cambridge Economic History of India*, I, pp. 61–2, for 'Alā'uddīn Khaljī's taxation measures.

[43] Baranī, 288.

[44] Baranī, 287, 288, 291.

cultural produce for the state. The limits of the area where this was done Baranī carefully defines by mentioning a number of places lying within it; the territory extended from Lāhore to Kara and from Katehr to Nāgaur with the environs of Delhi at its core (see map).[45]

Baranī then shows how the magnitude and mechanism of the agrarian taxation enabled 'Alā'uddīn Khaljī to achieve both his objectives, viz., filling the granaries and securing to grain-carriers supplies at low prices. His statements are worth reproducing, in as literal a translation as possible.

Passage 1:

The third regulation for establishing the cheapness of grain consisted in the collection of large quantities of grain in the Sultan's store-houses. The Sultan ordered that in the districts (*qaṣbāt*) of the *Khālīṣa* in the Doāb,[46] grain alone should be taken in lieu of the land-tax (*kharāj*), and that it should be conveyed to the Sultan's store-houses; in the 'New City' (Chha'in)[47] and in the Country of the New City, half of the royal tax (lit., the Sultan's share) be collected in grain alone, and this too[48] be stored in Chha'in and the districts (*qaṣbāt*) of Chha'in. The said grain should be delivered to the grain-carriers (*kārvānīs*); as a result so much of the Sultan's grain reached Delhi . . .[49]

Passage 2:

The sixth regulation for establishing cheapness of grain consisted in extracting

45 Baranī, 288.

46 In the text '*Miyān-i Doāb*,' 'Between the Two Rivers.' Wherever the name Doāb appears in the passages translated by me, it should be assumed that the name in the original is *Miyān-i Doāb*, meaning the land between the Ganga and the Yamuna.

47 *Shahr-i Nau*. According to 'Iṣāmī, 271 (also 273), this was the name given to Chha'in, the famous town near Ranthambhor. Baranī tends to confirm this when he says that after Ulugh Khan (who held Chha'in and Ranthambhor) died, he was succeeded in *Shahr-i Nau* by Malik 'Izzuddīn Burājā (p. 299). He adds that 'the land-tax in the New City (*Shahr-i Nau*) was exacted in the same manner as in the Environs of the City (Delhi) by measurement and (application of) crop rate per *biswa*'. This statement has obvious relevance here.

For the identification of Chha'in, see S.P. Gupta, 'Jhain of the Delhi Sultanate,' *Medieval India— A Miscellany*, III, pp. 209–15.

48 I follow I.O. MS Ethe 211, ff. 198b–199a, and S.A. Rashid, text, p. 136, in reading *wa ham* instead of *wa huma* ('and all') as in the Bib. Ind. text.

49 Baranī, 305–6.

letters (of assurances) from the revenue collectors (*mutaṣarrifs*) and functionaries (*kārkunān*) of the (assigned) territories (*walāyāt*)[50] to the effect that they would compel the peasants (*ri'āyā*) to sell grain by the side of the fields to the grain-carriers (*kārvānīs*) at the (fixed) prices. The Sultan ordered that the Royal Finance Ministry (*Diwān-i A'lā*) should take letters from the officials (*shahnas*) and collectors (*mutaṣarrifs*) of the *walāyāt*[51] of the Doāb, which is near the City (of Delhi), to say that they would demand the land-tax (*kharāj*) from the peasants with such harshness (*shiddat*) that the latter would not be able to bring the grain from the fields into their houses and engross it, and would be forced to sell the grain at low rates by the side of the field to the grain-carriers. As a result of the establishment of this regulation, the grain-carriers had no obstacle to face in conveying grain to the market (*manda*), and grain supplies constantly reached the market. For their own profit, villagers also brought whatever they could from the fields to the market and sold it at prices fixed by the Sultan.[52]

Baranī sums up the device described in Passage 2, when he lists, as the second of the four causes for the success attained in reducing prices, 'the heavy magnitude of land-revenue (*kharāj-hā*), since the peasants, impoverished by the heavy tax-demand, had to sell grain and goods at prices fixed by the Sultan'.[53]

Each of the two devices described in the two passages thus led to a cheapening of the grain; the difference was that in one case the tax was collected in kind, in the other in cash.

Passage 1 describes what happened solely within the *khālīṣa* territories, that is, within tracts whose revenues were reserved for the Royal Treasury. In such territories lying within the Doāb (including Delhi) the entire revenue was collected in grain; in those of eastern Rajasthan (the Chha'in tract) only half the revenue was collected in grain, the remainder presumably in cash.

Passage 2 relates essentially to the assigned territories, which seems to be the real sense of the word *walāyāt*. In contrast to the first passage there is no reference to the *khālīṣa*; and there would be no point in the Sultan's Finance Ministry taking letters of assurance from

[50] I follow Ethe 211, f. 199a. The Bib. Ind. text (as well as Rashid) reads *wilāyat*, country. Since the *wālī* was another name for *muqṭi'*, the word *walāyāt* (as distinct from *wilāyat* in the singular) could well mean the *wālīs* or revenue-assignees' territorial jurisdictions.

[51] Ethe 211, f. 199b (supported by Rashid) reads *wālāyat* while Bib. Ind. text again has *wilāyat*. See preceding note.

[52] Baranī, 307 (Rashid, 138).

[53] Baranī, 312.

kārkuns, *mutaṣarrifs* and *shahnas*, if they were its own officials and not those of the *wālīs* or *muqṭis*. In these territories grain was not taken in revenue, but the tax in money was to be so rigorously demanded as to force the peasant to sell part of his grain to pay the tax. Thus what the peasant was selling was not his own share, but really 'the Sultan's share' of the first passage, in lieu of which he had to pay the land-tax. There is no ground at all for supposing that Baranī intended to imply that the very peasants who had parted with half the grain in tax, were now further 'compelled to part with the rest for a price, so that they had no grain left for their own families'.[54] Indeed, if the peasant had already paid the tax in the form of grain, there would be no scope for the recourse to the device of rigorously collecting the very same tax in order to make him sell. The fact that revenue under 'Alā'uddīn Khaljī was collected by the *wālīs*, or revenue-assignees, in money, and not in kind, is borne upon us by a rather late account of the proceedings of Ghāzī Malik, the *wālī* of Depālpur. In a particular locality within his charge he is said to have demanded 'the whole year's revenue in money (*naqd*)' in advance, instead of in instalments as hitherto.[55] This was, indeed, collection in money with a vengeance.

Baranī's description of the two ways of getting grain supplies moving through taxation is, then, fairly clear. The only difficulty is posed by another passage, in which Baranī tells us that 'the entire country of the Doāb became in obedience (as) a single village and was brought into the *Khālīṣa*'.[56] Read with our Passage 1, this should imply that only grain was collected in the whole of the Doāb; and there would be no room then for the measure described in Passage 2. But just after telling us that the entire Doāb was made part of *Khālīṣa*, Baranī goes on to say: 'The whole of its tax-revenue (*maḥsūl*) down to the penny (*dāng o diram*) they brought into the Treasury, and it was out of it that they paid the salary (*wajh*) to the troopers and met the expenses of the Sultan's establishments.'[57] If so, the revenue must have been collected in cash, so that our Passage 2 would better describe the real conditions than Passage 1. The contradictions in these statements can, however, be reconciled by assuming that Baranī has dispensed with certain necessary qualifications

[54] *Comprehensive History of India*, V, 389.
[55] 'Afīf, 37–8.
[56] Baranī, 323–4.
[57] Baranī, 324.

when making his statements in absolute terms. If we suppose (*a*) that the *Khālīṣa* was very extensive (though not all-inclusive) in the Doāb, and within it in many villages the land-tax was levied in grain only; and (*b*) that cash was levied in many parts of the *Khālīṣa*, and in the territories of *wālīs*, who continued to hold *iqṭas* in the same region, his various statements may become quite intelligible and mutually non-contradictory. The device of Passage 1 would be in force where conditions summed up in (*a*) prevailed, and a Passage 2 where those outlined in (*b*) held true.

To return to what I regard as Baranī's main argument: grain supply at low prices depended upon the extraction of the agrarian surplus through the land-tax, brought directly into the Sultan's granaries or into the grain-carriers' hands by the rigour of the tax-demand. Insofar as the grain brought into the market was surplus produce, or grain above that needed for the producer's subsistence and for meeting the cost of other factors (seed, cattle, etc.), the 'costs of production' did not enter into the formation of the grain price. The floor for its sale price 'by the side of the field' was the size of the tax in money and the cost of its collection by the ruling class. This being so, grain prices could be arbitrarily set by the Sultan by linking them with the tax. What our Passage 2 tells us in effect is that instead of commuting x quantities of grain assessed as tax into y units of money at current market prices, the state now made this commutation at low prices arbitrarily fixed by it, and then enforced these low prices in the urban market, by assuring continuous supply of grain purchased by merchants in the villages at commutation prices set to match the fixed retail prices. There was an undoubted loss to the State in this, not commented upon by Baranī, but obvious to us: if the commutation rates were lowered, the total revenue in money terms would be correspondingly diminished. Thus one must assume that, unless wholly made up by an increase in the incidence of the land-tax, the total money revenue of the Khaljī government should have fallen as a result of the price-control measures, though the real value in terms of grain tonnage might have been larger. We shall return to this question in the last portion of this article.

The reduction of foodgrain prices was central to a general reduction of prices, since it induced a lowering of the subsistence costs of labour. This Baranī realizes very well, for he puts into the mouths of the Sultan's counsellors the argument that 'so long as strong regulations are not put into effect and firm balances not established for the

cheapening of grain, the articles necessary for subsistence (*asbāb-i ma'āsh*) will also not become cheap'.[58] Baranī's statement that wages were thereupon reduced to very low rates is corroborated by other sources (see (*f*) in Section I). Baranī says that the salary, obviously annual, of a servant or *chākar* under 'Alā'uddīn Khaljī was 10 or 12 *tankas*; this would be the equivalent of 1⅓ or 1⅗ *jītals* a day.[59] 'Ainu-l Mulk remembered that the wages of artisans (*muḥtarifa*) in the days of that Sultan were 2 or 3 *jītals* a day; and he clearly implies that the weavers' and tailors' wages were of this order.[60] The quotations in the two sources, one for unskilled, the other for skilled labour, match fairly well. It is not stated anywhere that 'Alā'uddīn Khaljī directly fixed servants' wages; but wages of manufacturing artisans might have been constricted by the prices fixed by the Sultan on 'the basis of the cost-prices (*barāwurd*) of the articles and the profits of the seller'.[61] Amīr Khusrau also writes as if the sale of their products by the artisans (*muḥtarifa*) was closely supervised.[62] The reduction in wages would, in turn, mean that there would be less effective demand (in money terms) for goods, and this would, therefore, generate a strong deflationary pressure. Baranī, indeed, remarks that one out of the four major causes of the prevalence of low prices was 'the lack of money (*bezarī*) in the hands of the people', so that the saying went, 'One camel goes for a penny (*dāng*), but who has one penny?'[63]

One can conjecture that if agricultural prices fell and wage-costs too were reduced, the prices of the goods manufactured within the price-control zone could be greatly reduced. Similar would be the case with those of the slaves: when wages of free labour fell, it would be unprofitable to use slaves bought at the old prices. Thus prices of slaves, insofar as there was no alternative market to Delhi for them, could conceivably be brought down fairly sharply.

Yet, there would at the same time be a large number of commodities which came from areas outside the price-control zone. Their prime costs would not be affected by 'Alā'uddīn Khaljī's tax measures.

[58] Baranī, 304.

[59] Baranī, 395. The first version (Elliot 353, f. 144b) records still lower pay for the *chākar*, 'eight *tankas*, at most ten or twelve *tankas*'.

[60] *Inshā-i Māhrū*, 48.

[61] Baranī, 316.

[62] *Khazā'inu-l Futūḥ*, 16.

[63] Baranī, 312. The comment on this argument in *Comprehensive History of India*, v, 391n, is perhaps unjustifiably harsh on Baranī.

Such would be the fine cloth from Tebrez and Devagiri;[64] the cavalry horses, which except for the lowly *tattū*, must have been largely imported;[65] and also the imported slaves. If prime costs could not be changed, other steps could still be taken to reduce the margin between the cost in the place of origin and the retail price at Delhi. Baranī describes how these steps were taken. Loans were advanced to merchants of high repute to bring in continuous supplies; engrossing was strongly suppressed; separate markets were established for particular goods to facilitate control and secure the buyers' direct access to caravan goods; the intrusion of brokers was dispensed with; and in the case of certain varieties of high-quality cloth, purchases were restricted to favoured classes (such as nobles and religious divines) so as to prevent the passing of the cloth into the hands of profiteers who might convey them to other more lucrative markets.[66] Clearly, the effort was to eliminate or reduce the component of speculative profits and intermediaries' share in the retail price. In the case of these particular commodities little more could perhaps have been done.

It would then seem that Baranī's elaborations of his view that the price-reductions rested on a combination of heavy agrarian taxation and administrative measures of great rigour, are fairly adequately supported by the factual evidence he presents, and by the very logic of the situation whose details he supplies. This carries us to three more questions, which are closely interlinked: the area affected by the price reductions; the effects of the phenomena on the various sections of the population; and, finally, the motives of 'Alā'uddīn Khaljī in enforcing the regulations. On all these Baranī has important information and observations to offer.

III

It is clear from Baranī's language that the comprehensive measures

[64] Baranī, 311.

[65] Baranī, 313. His earlier version contains references to the *daryāī* (imported, sea-borne) and *bālādastī* (Central Asian) horses sold at the controlled horse-market established by 'Alā'uddīn Khaljī (S. Digby, *War-horse and Elephant*, 38–9).

[66] For these various measures the entire account in Baranī on pp. 309–19 needs to be read. The harshness employed in putting them into effect is so firmly a part of current text-book history that one need not use up space in reproducing the details here.

for price-control that 'Alā'uddīn Khaljī sought to impose had the city of Delhi as their focus. Thus when he speaks of grain prices, he describes the control of the grain-market (*mandī*) at Delhi, placed under a *shaḥna* (Controller), Yāqūt.[67] Grain supplies are said to have 'reached Delhi' continuously;[68] and, as a result, 'no famine occurred in Delhi'.[69] So, too, in relation to prices of non-agricultural commodities: A great cloth market was established at the *Sarāi 'Adl*, 'an open ground inside Badāūn Gate towards the Green Palace' at Delhi.[70] Merchants were advanced loans to bring high-quality cloth to 'the City' (Delhi).[71] When the brokers were eliminated in the horse-market, they were exiled 'from the City'.[72] On the other hand, there is no reference to similar measures taken in any other city.

The other fourteenth century sources are rather vague and self contradictory about the extent of the price-control zone. Amīr Khusrau says grandly that both 'the city-man and the villager' benefited from the Sultan's bounty; but his description of the *Dāru-l 'Adl* (*Sarāi 'Adl*) must solely refer to Delhi.[73] Ibn Baṭṭūṭa makes no definite statement,[74] but 'Iṣāmī says that 'Alā'uddīn Khaljī entertained the ambition that

> *Plenitude should be achieved, and scarcity banished;*
> *Thus may the City be protected.*[75]

Naṣīruddīn Maḥmūd specifically describes the absence of scarcity at Delhi under 'Alā'uddīn Khaljī and tells us how the Sultan arranged with the grain-carriers to bring grain to 'the City'. But he goes on to include 'the people of the world' among the beneficiaries of the measure.[76]

Similar vagueness about the *locale* of the ptice regulations is to be found in a letter which 'Ainu-l Mulk wrote (from Delhi or Multan) in the early years of Fīrūz Tughluq. In this, while dealing with a complaint over new taxes levied at Uchh, 'Ainu-l Mulk compares the prosperity of the artisans of his day (now being taxed) with the

[67] Baranī, 305. ff.
[68] Baranī, 306.
[69] Baranī, 308.
[70] Baranī, 309.
[71] Baranī, 310–11.
[72] Baranī, 311.
[73] *Khazā'inu-l Futūḥ*, 20–2.
[74] Ibn Battūta, text, 429–30, tr., 41–2.
[75] Iṣāmī, 315.
[76] *Khairu-l Majālis*, 185, 241.

conditions prevailing under 'Alā'uddīn Khaljī when very low wages used to be paid. It may conceivably be argued that this means that Uchh was affected by 'Alā'uddīn Khaljī's price regulations; but for 'Ainu-l Mulk's argument it was not at all necessary that the artisans with whose conditions he was favourably comparing those of the artisans of his own day should also have belonged to Uchh.[77]

An explicit statement that the low prices had a more extensive domain than Delhi and its environs seems to have come, first of all, from Firishta, writing early in the seventeenth century. Before quoting the grain prices that he takes from Baranī, he says: 'What (prices) were fixed at Delhi are as follows; from these one may imagine the rates (lit., conditions) in the other parts'.[78] This concern with an intriguing question does Firishta credit; but there is no proof that he had any authority to back his suggestion of similarly low prices prevailing elsewhere.

It has been contended that prices could not have been reduced just at Delhi, because, according to Baranī himself. 'Alā'uddīn Khaljī wished to maintain a larger army at a smaller expense; and all expenditure on the army could hardly have been confined to Delhi.[79] But there is no doubt that much of it, at any rate, was so confined. The Sultan's troopers having been placed on cash-pay distributed from the Treasury,[80] would have been normally concentrated in Delhi. Here, too, was the large Army Camp—the *Lashkar*, of which we hear in Niẓāmuddīn's conversations.[81]

There was, therefore, nothing unreasonable in the Sultan's attempt to keep prices low at Delhi, the capital, the principal city and military camp of the Empire. But this attempt in itself necessitated control of prices at a number of other points. First of all, Baranī himself tells us of the sale-prices of grain being set low throughout the Doāb, 'being near the City,' so that the grain purchased at the price might be brought

[77] *Inshā-i Māhrū*, 48.

[78] Firishta, *Gulshan-i Ibrahīmī* or *Tārīkh-i Firishta* (Kanpur: Nawal Kishore, 1874), I, 112.

[79] *Comprehensive History of India*, V, 388.

[80] Baranī, 323–24.

[81] *Fawā'idu-l Fu'ād*, 195 (meeting, 8 April 1314). Amir Hasan, who was a military officer, said that he now lived in the *Lashkar*, where he had obtained a house, and went to the City only once in 10 or 12 days. For the *Lashkargah* at Siri, see ibid., 311 (8 February 1318). See M. Athar Ali, 'Capital of the Sultans during the 13th and 14th centuries,' Indian History Congress Session (1981), cyclostyled, pp. 11–12.

to Delhi for sale at profit. (See Passage 2 in Section II). Thus, in the region around Delhi, a general fall in agricultural prices had to be enforced to enable supplies to reach Delhi. It is perhaps this lowering of the rural prices—attained through the tax-mechanism, as we have seen—which induced Amīr Khusrau to speak rhetorically of 'the villager' deriving benefit from the cheapness of grain.[82] The fall in rural prices in the Doāb would have affected prices in the towns within it as well. Similar conditions might be expected in the Trans-Yamuna tract comprising the environs of Delhi and the territory of Chha'in, where large granaries were established (see Passage 1 in Section II).

Beyond these extensions of the price-control area, it is difficult to see how prices could have been reduced where the kind of agrarian tax-measures taken in the Doāb were not resorted to. In any case, if high agrarian-taxation was at the root of the success of the price regulations, it is not to be expected that its range went beyond the limits that Baranī himself defines for the zone where 'Alā'uddīn Khaljī's heavy-tax system operated (see map).[83] Multān, for example, would then be definitely excluded from the price-control zone. This is more positively established from Baranī's own text, when he speaks of a Muslim theologian (Shamsuddīn Turk), who, coming to India, decided to return to his homeland from Multān, where he 'heard' of 'Alā'uddīn Khaljī's indifference to religion. And there too he 'heard' of the Sultan's price-control measures.[84] We must assume from this that at Multān one could not directly experience this wonderful phenomenon. The existence of accessible markets not far from Delhi where higher prices prevailed, is shown by the anxiety displayed by the Sultan for preventing high-quality goods being cheaply bought by profiteers at Delhi and then conveyed to those markets.[85]

[82] *Khazā'inu-l Futūḥ*, 21.

[83] Baranī, 288.

[84] Baranī, 298.

[85] See, especially, Baranī, 311–12. The goods in *Sarāi 'Adl* were not to be sold to merchants (*saudāgar*) (p. 311). Further:

> The *Ra'īs* gave permits (*parwānas*) for (purchase of) fine cloth to the commanders, nobles, great men and divines according to his knowledge of their circumstances of life; and if he knew that the person was not a merchant and (yet) wished to purchase cloth at the *Sarāi 'Adl* at cheap rates and then sell to others taking it to other parts at a price four or five times the price at *Sarāi 'Adl*, he would not give him the permit. (pp. 311–12).

IV

Even if, as it seems to have been almost certainly the case, the price-regulations affected Delhi and its surrounding region only, these were a unique set of measures; and Barani unhesitatingly gives expression to a sense of awe at this notable administrative achievement. In fact, he put it, as 'a wonder of the age,' at the top of 'Alā'uddīn Khaljī's successes—even above his conquests and the repeated repulse of the Mongols.[86] Yet, here too, Barani's inherently critical bent of mind does not permit him to see the achievement in the same light as his contemporaries did.

To Amīr Khusrau, the measure was an act of immense generosity on the part of the Sultan, undertaken for the sake of 'general comfort, the welfare of the elect and the public at large,' and of 'the general benefit of the city-man and the villager.'[87] Ibn Baṭṭūṭa noted how 'the people of Hind' greatly praised 'Alā'uddīn Khaljī on this account.[88] 'Iṣāmī lauded the measures for the relief they gave to 'the people' (*khalq*), and classed their author among those sovereigns who 'grieve for the down-trodden (*zerdastān*) of the world,' and 'always are benevolent towards their subjects (*ra'iyat*).'[89] Naṣīruddīn Maḥmūd, the Chishti divine, recounted how Sultan 'Alā'uddīn was anxious to do something from which 'gain would accrue to all people (*huma-khalq*)'; and this was secured through his price-control measures.[90] Baranī himself puts into the mouth of Shamsuddīn Turk a commendation of 'Alā'uddīn Khaljī's price-control measures which were 'of benefit to the entire humanity'.[91] Indeed, in his first version Baranī wrote that in spite of his cruelties, 'Alā'uddīn came to be regarded, owing to his price-control measures, as 'more benevolent and kind than one's own father and mother' by all people except the market-men (*bāzārīs*).[92]

Baranī's own assessment of the benefits flowing from price-control was far more discriminating. The restraint may be seen when, putting the measures at the top among 'Alā'uddīn Khaljī's achievements, he refrains from expressly styling them a work of general public

[86] Baranī, 339.
[87] *Khazā'inu-l Futūḥ*, 21.
[88] Ibn Baṭṭūṭa, text, 429, tr., p. 41.
[89] 'Iṣāmī, 314–15.
[90] *Khairu-l Majālis*, 241.
[91] Baranī, 298.
[92] Elliot 353, f. 144b.

welfare.[93] This must be surely because his own analysis of their mechanics showed that the low prices did not mean an enhancement of the real income of all; on the contrary, they meant an increase in the real income of some and the diminution of that of many.

First of all, the entire fabric rested on a very heavy agrarian taxation. The peasants, 'from the headman (*Khūṭ*) to the menial (*balāhar*),' had to part with half the produce;[94] not only that, the tax was to be realized with 'such harshness' (*shiddat*) that the peasants (*ri'āyā*) would be forced to sell all the grain and hold back no surplus for stocking, or 'engrossing'.[95] This reminds us of a later historian's remarks about the total helplessness of the peasants in the reign of 'Alā'uddīn Khaljī: Even when the *wālī*, Ghāzī Malik, demanded a year's revenue in advance, they could do nothing; for no one could make any 'babble or noise' in the time of that stern Sultan.[96] One day, in 1315, conversation took a turn in the circle of Niẓāmuddīn, the Chishti saint, to the subject of 'those who oppress the people and impose the land-tax ("*kharāj* and *jiziya*") and the cess on cultivated fields'[97]—the present tense of the verb 'oppress' may be noted.

Large segments of the upper rural population were also greatly impoverished as they themselves became subject to tax-demand and were forbidden to levy their cesses (*huqūq*). No longer could 'the *chaudhurīs*, *khūṭs*, and *muqaddams* ride horses, wield arms, wear good clothes, and chew betel leaf'; even the women of the *khūṭs* and *muqaddams* had to take service in Muslims' houses.[98] Part of the grain and other rural products, which these classes consumed, must now have gone to Delhi and the other towns in tax-payment, and so augmented supplies there.

Insofar as the enlarged and continuous stream of supplies to Delhi and the neighbouring towns rested on the enormous deprivation of the countryside, these favoured the city against the village; and so the gain from the fall in prices accrued to the 'city-man' in general, and not to 'the city-man and villager,' as Amīr Khusrau claims. The maintenance of low prices, even if under a rough rationing system

[93] Baranī, 339 ('cheapness of grain, goods and means of subsistence').
[94] Baranī, 287.
[95] Baranī, 307.
[96] 'Afīf, 57–8.
[97] *Fawāidu-l Fu'ād*, 232. For the *jiziya* coupled with *kharāj* as signifying the single land-tax, see *Cambridge Economic History of India*, I, 61.
[98] Baranī, 287–8.

during bad seasons,[99] made a deep impression on all our authorities. The prevention of the recurring famine conditions in Delhi—a great famine had ravaged it under Jalāluddīn Khaljī[100]—was certainly a good enough reason for the gratitude felt by the citizens of Delhi towards 'Alā'uddīn Khaljī.

But within the city the gain from the low prices was by no means universal. We may leave aside for the moment the 'market-men' (*bāzārīs*), viz., the engrossers, the brokers and the like, whose profits were forcibly curtailed by the price regulations.[101] A major section of the population who seems to have had its real income reduced was that of the artisans and the unskilled labourers and servants. This arose partly because, as we have seen, the prices of manufactures came to be fixed as well, so that the income which the artisans obtained by selling their products was sharply reduced. 'Ainu-l Mulk contended that, though grain prices in 'Alā'uddīn Khaljī's time had not fallen to such low levels as prevailed at the time he was writing (Fīrūz Shāh's reign), the artisans in the earlier reign used to earn far less (2 or 3 *jītals* a day)—indeed, almost one-tenth of what they earned in his own day.[102] Naṣīruddīn Maḥmūd recalled that under 'Alā'uddīn Khaljī a tailor would charge 4 or 6 *jītals* for preparing a robe, whereas at the time he was speaking—*c.* 1354—no less than one *tanka* (48 *jītals*) would be charged.[103] In his first version, Baranī says that a tailor was paid 2 *jītals* only under 'Alā'uddīn Khaljī, as against half a *tanka* that he could get for the same work early in Fīrūz Shāh's reign.[104] Elsewhere, he says that the 'wages of labourers' in 'Alā'uddīn Khaljī' time were a fourth of what they came to be under Quṭbuddīn Mubārak Khaljī, and of the servants, one-sixth or one-tenth.[105] Under 'Alā'-uddīn, there had thus been 'a general lack of money (*bezarī*) in the hands of the people'.[106]

It is possible that the soldiers fared a little better. Their salaries too were fixed, and Baranī's contention, as we shall see, is that the

[99] Baranī, 308–9.

[100] 'Iṣāmī, 217–21; Baranī, 212. Baranī says grain then sold for 1 *jītal* per *ser*, or 40 *jītals* to the man.

[101] Cf. Baranī, 298, 312 ff., 340–1, 343. For the jubilation of the *bāzārīs* after the death of 'Alā'uddīn Khaljī, see Baranī, 385.

[102] *Inshā-i Māhrū*, 48.

[103] *Khairu-l Majālis*, 42.

[104] Elliot 353, f. 144b.

[105] Baranī, 385–6.

[106] Baranī, 312.

prices were lowered to enable the Sultan to pay lower salaries to soldiers. Baranī's statement of the rates of the soldiers' pay in the final version is difficult to understand, and the text may be corrupt.[107] In the first version he says that 'Alā'uddīn Khaljī gave a cavalryman in salary 200 *tankas* for the *murattab* to provide him 'with weapons, equipage, tent, (draught) animals, a slave, a slave-girl, and one-poled (tent)', and another 78 *tankas* for the *do-aspa* to provide 'equipage, weapons and horse'.[108] This denoted a fair amount of prosperity for the cavalry trooper; and one recalls 'Alā'uddīn Khaljī's special concern for reducing the prices of horses and slaves.[109]

The greatest advantage from price-control would naturally have come to people who did not suffer from *bezarī*, or lack of command over money. At another place Baranī tells us that under Sultan 'Alā'-uddīn, 'things came to such a pass that except for the houses of the nobles (*māliks*) and commanders (*umarā*), officials (*kārdārān*) and Multānīs (merchants) and *sāhs* (bankers), little money (*zar*) was to be found anywhere'.[110] It was these classes, then, that stood to gain most from lower prices.

Though the 'market-men' suffered, as Baranī tells us repeatedly, the merchant proper had a fairly respectable position in 'Alā'uddīn Khaljī's system; the Multānīs indeed received large treasury loans to encourage them to bring supplies of luxury goods from distant places.[111]

The principal gainers of all must have been the nobles. Their revenues in money should, it is true, have contracted in the Doāb and the Trans-Yamuna tract, as the commutation prices were so radically lowered. In terms of purchasing power, of course, this would not have been a contraction. At the same time the treasure already in their possession would have had its purchasing power greatly enhanced. Moreover, the revenues collected outside the limits of the zone where commutation prices had been reduced would be on the old scale, and yet be worth far more in Delhi in terms of goods. The special provision

[107] Baranī, 303 (Rashid, 134). The text reads differently in Ethe 211, f. 194a; it omits all reference to *yak-aspa*, and is conformable in sense to the corresponding passage in the first version, but is much briefer.

[108] Elliot 353, f. 143a. *Yak-chobī*, 'one-poled (tent)' may signify an umbrella as well.

[109] Baranī, 313–15.

[110] Baranī, 283–4.

[111] Baranī, 311.

for supply of high-quality cloth at *Sarāi 'Adl*, restricted to the nobility and theologians, illustrates the royal concern for the 'welfare' of the nobility.[112] Otherwise, too, the cheap supply of good horses and good slaves, from good-looking boys to ordinary workers,[113] must have been a matter of much satisfaction to this class.

The wealth of the nobility found one of its outlets in generous charities, the establishment of numerous free kitchens (*langars*) in Delhi and its environs, the distribution of free mantles to mendicants (*faqīrs*), and the proliferation, as a result, of dervishes.[114] Those were therefore good days for religious men, as the Chishti saint, Naṣīruddīn would recall tearfully some forty years later.[115] Not surprisingly, under these conditions, there was a notable growth of religious devotion among Muslims that Baranī observed as a special feature of the last ten years of 'Alā'uddīn Khaljī's reign.[116]

V

If we have now gone in our inferences and conclusions a little beyond Baranī, the bedrock for them is still his analysis. He was aware that the price-control measures were not a universal boon; more, he doubted if the motives in introducing these were purely philanthropic in the way every other contemporary commentator, without exception, has supposed.

Besides the courtier's claim by Amīr Khusrau that the entire measure was an exercise in royal generosity,[117] we have the rather circumstantial story told by Naṣīruddīn in his conversations. Qāẓī Ḥamīduddīn 'Malikut Tajjār', the Qāẓī of the Empire under 'Alā'uddīn Khaljī, once came to Awadh (Ayodhya), and there he invited Naṣīruddīn along with other guests to dinner. The Qāẓī recounted how once finding the Sultan deep in thought, he had respectfully sought the reason. The Sultan had replied that he was greatly conscious of God's bounty to him, and wished 'to do something whose benefit may reach all people'. This was not easy to do, for even if he distributed his

[112] Baranī, 311–12.
[113] Baranī, 313–15.
[114] *Khairu-l Majālis*, 185, 240–2.
[115] *Khairu-l Majālis*, 185.
[116] Baranī, 341, ff.
[117] *Khazā'inu-l Futūḥ*, 20–1.

treasure, it would reach few people. So, the Sultan said, he had now hit on the design of cheapening the grain so that all might benefit.[118]

How Baranī would have reacted to this obvious piece of public relations on behalf of 'Alā'uddīn Khaljī by a minister, one can easily conjecture. Qāẓī Ḥamīduddīn Multānī was by no means a favourite of Baranī, who in fact regarded the appointment of that Prince of Merchants (*Malikut Tajjār*) to high theological office as a great scandal.[119] That there were many ordinary people who prayed for the Sultan and visited his grave as if he was a saint,[120] was simply proof that there was no end to credulity. How could a bloodthirsty tyrant like 'Alā'-uddīn Khaljī have been a saint, and 'have received revelations and worked miracles'?[121] Baranī quite firmly fails to see any sudden conversion of Sultan 'Alā'uddīn to the creed of benevolence and social welfare.

At present it is next to impossible to credit or discredit the 'official' thesis of the Sultan's benevolent intentions which has reached us through Amīr Khusrau and the *Khairu-l Majālis*.[122] Baranī's view was different, and, since this too involves a question of intentions as against hard visible facts, it is also difficult to accept or reject it. Nevertheless, as I hope to show presently, it is a very plausible explanation of 'Alā'uddīn Khaljī's real motives.

As is well known, Baranī thought that the price-regulations came as a solution to a critical financial problem. This was caused by the continuous stream of invasions from the Chaghatai Horde in Trans-Oxania. To protect the very heart of his dominions it became necessary for 'Alā'uddīn to undertake a vast amount of expenditure. A fortified wall had to be thrown around Delhi; the ruined forts along the routes of the invasions had to be entirely rebuilt; and at several places new forts had to be erected. All forts had to be held by able castellans and provided with ballistas and military stores, and stocked with grain. Large armies had to be stationed at Sāmāna and Depālpur. Above all, there had to be kept in readiness a very numerous army of trained cavalry with good horses and remounts (*nek-aspa*). These troopers needed to be paid such large amounts every year as 'to denude the

[118] *Khairu-l Majālis*, 241.
[119] Baranī, 298–9, 352.
[120] *Khairu-l Majālis*, 241–2; Baranī's own first version, Elliot 353, f. 144b.
[121] Baranī, 265.
[122] For an almost total acceptance of this version, see *Comprehensive History of India*, V, 373–9.

treasury within five or six years'.[123] If the troops were to be employed within the existing resources, without completely draining the treasury, no more than 234 *tankas* could be paid in annual salary (*mawājib*) to the '*murattab*' or fully equipped soldier, who brought two horses along with all that he needed in the shape of tents, draught animals, slaves, etc., and 78 *tankas* to the *do-aspa*, or horseman with a remount, who was provided with all the equipment and a good horse by the State.[124] But such low payments could be put into effect only if the troops were still able to get all the articles and animals they were required to maintain and also such goods and services as were necessary for the maintenance or subsistence of their families, servants and slaves. The only way to achieve this was to reduce prices.[125]

The first portion of Baranī's interpretation may be accepted. The recurring Mongol invasions were a fact, for which Baranī may be supplemented by 'Iṣāmī'. That 'Alā'uddīn Khaljī was obliged to put a very large amount of money into circulation is indicated by the spurt in the surviving coinage from his reign, which numismaticists attribute to 'the enormous quantity of gold and silver' brought from the Deccan. From 1302–3 he issued gold and silver coins from two Delhi mints.[126] Clearly, the numismatic evidence would tend to confirm Baranī's statement that 'Alā'uddīn Khaljī's treasury came under great strain owing to the Mongol invasions. This should make one still more receptive to Baranī's argument that it was mainly in order to check this expenditure without hurting his military resources that 'Alā'uddīn Khaljī attempted the novel device of forcing down prices.

This reading of 'Alā'uddīn Khaljī's motives has been censured on the ground, among others, that 'Alā'uddīn regulated the price of commodities that had no importance for the military'.[127] However, as stated by Baranī, the chief object was not the cheapening merely of the military stores and horses, but also the reduction of the salaries of

[123] Baranī, 303–4.

[124] I give this interpretation of the text on the basis of Baranī's first version (Elliot 353, f. 143a) read alongside his final version as in Ethe 211, f. 194a. As noted earlier, the printed text (Baranī, 303; Rashid, 134) is corrupt and the basis it offers for fixation of salary is difficult to understand. However, it should be noted that Elliot 353 reads 200 for 234, and Ethe 211 has 88 for 78 *tankas*.

[125] Baranī, 304. Baranī offers the same motive for reduction of prices in the first version (Elliot 353, f. 143a), but much more briefly.

[126] H. Nelson Wright, *The Coinage and Metrology of the Sultans of Delhi* (Delhi, 1936), pp. 107–8.

[127] *Comprehensive History of India*, v, 272.

cavalrymen and other troopers. This could not be done without reducing the costs of subsistence of the troops and their families, which, in turn, could only be achieved by reducing prices of foodgrains and manufactured goods needed by them. For the latter purpose, the general wage costs had to be reduced as well; and thus, to be successful in its object, the design required the reduction of prices of all goods whether directly required by the troopers or not.

A more serious objection arises out of a point I have already touched upon in Section II. The sale prices could only be reduced if the commutation prices for revenue purposes were also correspondingly reduced. In that case, the revenue collections would also be smaller. Where was, then, the gain for the Treasury if its income was also reduced along with the fall in prices?

At first sight this might more or less dispose of Barani's theory. But closer scrutiny suggests that the objection ignores the fact that all revenues of the Empire were not reduced by price-control, for, as we have seen, the price-control zone was limited to the region around the capital. Both the revenues and the expenditure were therefore divisible into two portions, (*i*) R and E being respectively the annual revenue collected and the annual expenditure incurred in the price-control zone, and (*ii*) Ŕ and É, the annual revenues and expenditure outside the zone. Now, suppose that early in 'Alā'uddīn Khaljī's reign, excessive expenditure had to be incurred in the area around Delhi, the future price-control zone. Then the revenues from outside of this central zone must flow in to meet the excess expenditure undertaken here. We may hypothetically represent the position as follows:

R,	E,	Ŕ,	É,	New Income [(R + Ŕ) - (E + É)]
50,	90,	50,	25,	– 15

In other words, there would be a contraction of treasure by 15 units of money. Now, if prices were reduced by half in the central zone, R and E would also be reduced by half, while Ŕ and É would remain constant. So we may have:

R,	E,	Ŕ,	É,	Net Income
25,	45,	50,	25,	+ 5

The price-control measures could accordingly convert a net drain of 15 units of money per annum into a net gain of 5 units. It follows that price-control in the central zone would help to enlarge treasure, so long as the larger expenditure of the State took place in that zone,

while a large part of the revenues was collected outside of it. We can see, then, that Baranī's basic argument is theoretically very plausible.

Indeed, it can be conversely demonstrated that, if with changing circumstances, the points where the bulk of the expenditure was incurred began to move away from the central zone, price-control would no longer serve the purpose of maximizing the annual augmentation of the Sultan's treasure. Suppose that, while price-controls continued in the central zone, a large part of funds previously spent there is now spent outside that zone. The figures in our second illustration may, then, alter to:

R,	E,	Ŕ,	É,	Net Income
25,	20,	50,	50,	+ 5

R + Ŕ and E + É still equal the respective totals in our second illustration; the annual net inflow into the treasury stays at 5 units. But if the price-controls were now to be abolished, and the prices allowed to double in the central zone, R and E would increase correspondingly. As a result both R + Ŕ and E + É would increase, but R + Ŕ more than E + É:

R,	E,	Ŕ,	É,	Net Income
50,	40,	50,	50,	+ 10

The net income would rise to 10 units, i.e., double itself. In other words, it would now be more profitable for the treasury to give up the attempt at price-control, and let R rise at the same pace as the 'free' market prices.[128]

It may, therefore, be that the abandonment of price-controls under 'Alā'uddīn Khaljī's successors partly derived from the shift in the main theatres of military and other expenditure. With the Mongols no longer a threat, beginning with the reign of Quṭbuddīn Mubārak Shāh

[128] One other possible argument may be that a low-price zone should have attracted bullion inflow from other areas so that in course of time the maintenance of low prices would become increasingly difficult. But this could only happen if (*a*) the price-differences between the zones were larger than transport costs for basic wage-goods like foodgrains; and (*b*) there was free trade. Neither conditions would seem to have existed. That large inter-regional price differences existed before the railways may be seen from the maps of average wheat and gram prices, 1861–70, in Zahoor Ali Khan, 'Railways and the Creation of National Market in Foodgrains', *Indian Historical Review*, 4, 2, 1978, pp. 343, 348. Bullion movements did not bring about any price-equalization here.

(1316–20),[129] the price-control policy could be scrapped—as, in fact, happened during that reign.[130] This is not to say that other factors, such as lack of administrative cohesion and the personal qualities of the succeeding Sultans, did not play a part in making the history of price-controls a short one. But the interest in treasure acquisition (which had also motivated 'Alā'uddīn Khaljī) should certainly have dictated, in the changed circumstances, a dismantling of the price-controls.

[129] Baranī, 387. An alarm over a possible Mongol raid is, however, referred to in *Fawā'idu-l Fu'ād*, 373 (conversation of 24 October 1319); it had led to a rise in prices, but this had by then abated. (Read *girānī* for *nigrānī* in the printed text.)

[130] Baranī, 384–5.

Chapter Three

The China Connection: Problems of Silver Supply in Medieval Bengal

JOHN DEYELL

The Ghorid conquest of Hindustan as far east as Gauda (Bengal) in the late 12th century AD, was accompanied by the attempted establishment of a common North Indian currency. Islamic coinage norms, the gold *dinar*, silver *dirhem* and copper *falus* common in Iraq and the west, had been somewhat modified during the slow advance into the Indian cultural sphere in Seistan, Afghanistan and the Punjab. The basic coinage of the Ghaznavid, Shahi and Rajput dynasties of N.W. India in the 9th-12th centuries was the billon (base silver) 'bull and horseman' *dramma* of 3.3 g and variable fineness of alloy. This circulated, in India, with a gold coin of 4.1 g of .650–.980 fineness, and in Afghanistan with both a gold coin of 8.7 g and approximately .950 fineness, and a silver coin of 5 g and .950 fineness. The compromise settled on by the early Turkish sultans of Delhi was a currency of four coins, a gold *tanka* of 11 g and .950 fineness, a silver *tanka* of 11 g and .980 fineness, a billon *dehliwal* or *jital* of 3.6 g and .50–.160 fineness, and copper coins of 2.3–4.5 g pure metal.[1]

Both gold and copper coins remained rare in Delhi throughout the 13th century, and the de facto coinage was limited to the pure silver *tankas* and alloy *jitals*. Reliable statistical data as to the relative

[1] Sources of coin weights: A. Cunningham, *Coins of Medieval India* (Delhi, 1967) (reprint); V.A. Smith, *Catalogue of Coins in the Indian Museum, Calcutta, Volume* I; H.N. Wright, *The Sultans of Delhi, Their Coinage and Metrology* (Delhi, 1936).

Sources of coin assays: Wright, S.K. Maity; *Journal of the Numismatic Society of India*, vol. XXII, (1960), p. 270, p. 272, p. 275.

or absolute quantities of these coins in circulation is not available. This is primarily due, strangely enough, to the overabundance of surviving or 'recaptured' coinage: in the aftermath of the annual monsoon, immense numbers of the *tankas* and *jitals* are unearthed. In the face of this intimidating quantity, the numismatic literature has long ignored hoard data for Delhi Sultanate coinage, being largely content with publishing unusual dates, mints, denominations and rulers. The converse of this lack of objective statistical material is the judgement born of the experience of numismatists handling large numbers of the coins over a period of time. Subjective analysis might reveal a profile of annual quantity of coins minted as in *Graph One*.

The volume of billon coins in the early 13th century remained fairly constant and was equal to the combined output of the Rajput kingdoms displaced by the sultanate. The issues of broad silver *tankas* were sporadic, those of Iltutmish (AD 1210–1235) being scarce and of the other early sovereigns, rare. The assumption of regular and more prolific issues of silver *tankas* following the death of Iltutmish was accompanied by a fall in the quantity of billon coins issued, as well as a drop in the silver content of these billon coins. Clearly the supply of coinage silver was fairly fixed, such that the initiation of silver coinage was made at the expense of silver in the form of billon coins.

The accompanying *Map One* of South and South-east Asian precious metal resources, shows the primary sources of silver available to the Delhi sultanate. During the century prior to AD 1294 these would necessarily have been within the immediate sphere of influence of the Turkish ruling groups: the Ganges basin, the Punjab and Afghanistan. The mines at Zawar in Rajasthan are excluded since they were not extensively exploited until the 15th century AD.[2] The ports of the Gujarat and Bengal coasts in this period were beyond Turkish political influence; the supply of bullion from these trade sources is problematical; not immediately demonstrable. Rather, the major silver mines of the Panjhir and Wakkhan in northeast Afghanistan, which were worked by the Samanid and Ghaznavid dynasties, in succession, are the likely candidates for a reliable but limited silver supply for the Indian sultanate. The immense quantities of bullion mined in the 10th century which flowed north along the Samanid-Varangian trade routes

[2] J. Tod, *Annals and Antiquities of Rajasthan* (London, 1920), vol. I, p. 321.

to the Baltic were no more;[3] while not exhausted, the Panjhir mines were definitely more limited in their output.[4] Further, by AD 1222 the mines had passed into the control of the Mongols;[5] this became the primary source of silver for the Ghazni *dirham* issues of Chengiz Khan.[6] Hence rather than working a directly controlled precious metal resource, the Delhi sultans were reduced by mid-century to the reminting of foreign silver: *dirhams* which passed by way of trade and booty through the Punjab and Sind buffer states into Hindustan, in addition to those coins derived from the Hindu littoral states.

The effect of this phenomenon of a steady but curtailed silver supply is clear in *Graph One*, as discussed above. Since the bulk of the sultanate's coins were minted at the 'Delhi' mint, the gateway of Hindustan, the effect of this stationary bullion stock was largely felt throughout north-west India alone. A secondary mint at Lakhnauti in Bengal was regularly operated by the sultans and their governors, and this in turn may have placed a slight further strain on available silver.

The pre-Islamic coinage experience of this eastern province was in strong contrast to that of Hindustan: with the exception of very rare gold *dinaras* and silver *drammas* during the Pala and Chandra dynasties respectively,[7] the sole recognizeable currency of Bengal was the cowry shell, until the Muslim invasion (the use of metal ingots in trade is indeterminate).[8] The primary coin introduced by the Turks in Bengal was the silver *tanka*, and this initially circulated in restricted quantities comparable to the contemporary Delhi silver issue (see *Graph Two*). The modest issue of Lakhnauti silver *tankas* by the Turkish governors of the Delhi sultans was one facet of the penetration of an alien Central Asian culture into the area, and it seems reasonable to an alien Central Asian culture into the area, and it seems reasonable to attribute a common source of silver to the initial Delhi and Lakhnauti mint issues.

[3] Michael Mitchiner, *The Multiple Dirhems of Medieval Afghanistan*, p. 7 ff.
[4] Hamd-Allah Mustawfi, *Nuzhat-al-Qulub*, tr. G. Le Strange (London, 1919), p. 193.
[5] Md. Habib, 'The Mongol Invasion of Ajam,' in *A Comprehensive History of India, Vol.* v, The Delhi Sultanate (Bombay, 1957) (reprint), p. 80.
[6] Stephen Album attributes the Chingiz issues to Ghazni, and presumes the maintenance of the Panjhir silver supply as consistent with the Mongol policy to spare artisans and exploit established resources of wealth.
[7] F.A. Khan, *Excavations at Manamati*, Dacca, Dept. of Archaeology Govt. of Pakistan, 1963, re: Chandra silver coins.
[8] Minhaj-us-Siraj, *Tabaqat-i-Nasiri*, in Elliot and Dowson, *The History of India as Told by Its own Historians* (Delhi, 1967) (reprint), vol. II, p. 308.

The subdued scale of the eastern mint activity would not unduly disturb silver availability in the western capital, Delhi, especially if the conquest of the province had netted appreciable quantities of silver booty.

The scarcity of bullion in the Delhi sultanate was sharply terminated by the military campaigns of Alauddin Khalji in the Deccan (1295–1311). The war booty and tribute from the expeditions against Devagiri and Warangel brought great quantities of treasure into the possession of the Delhi rulers,[9] which they could, and did, release as specie when required. *Graph One* shows the dramatic impact of this treasure on the quantity of gold, silver and billon coins minted after AD 1295. Gold, hitherto rare, became a circulating coin; the silver *tankas* became inordinately common; an unprecedented issue of billon minor coins was made. Immediate effects of this coinage plenty would logically appear to be a general inflation of prices and an emigration of currency to provinces rich in relatively cheap products (pre-eminently Bengal). The former conjecture seems to be supported by the rigid and rigorously-applied system of market controls instituted by Alauddin in order to regulate prices.[10] The latter would appear to the supported by the *Graph Two* curve which shows a sharp increase in coinage issue in the reign of Ruknuddin Kaikaus of Bengal. AD 1291–1301, rising steadily throughout the first half of the 14th century.

However caution is required in both instances. It seems likely that the economy of the 13th century Delhi sultanate was under-monetized; that is, the use of coinage was restricted both by custom and coin scarcity. Considerable economic transactions, such as the payment of revenue to government and endowed institutions, and provision of services throughout the society, were both accounted and carried out in kind, without reference to monetary value.[11] In a mixed barter/money economy, drastic expansion of the money supply would first of all result in increased use of currency in transactions. In this the result may have been increased penetration of money use into traditionally non-monetized relationships.[12]

[9] Habib, pp. 322–3 (Devagiri), 334–5 (Gujarat), 409–410 (Warangel) 416–417 (Madurai).

[10] Ibid., pp. 372–391.

[11] In interpreting epigraphs of the period it is necessary to distinguish between money of account and money itself. Coin names often referred to an evaluation of goods tendered, rather than a sum of actual money.

[12] W.H. Moreland, *The Agrarian System of Muslim India* (Allahabad, 1929),

Secondly the ascending curve of Bengali silver coin production anticipated the Khalji military conquests by some four years; the initial impetus is thus clearly independent of developments in Hindustan. This point is most important, and will be returned to shortly.

It is not at all certain that the opening of the south to Delhi influence provided a reliable long-term supply of silver bullion at least for the North Indian sultanate. *Map One* pinpoints the prolific precious metal resources of South India, the famous Mysore and Kolar gold fields. Indeed, from the demise of the Mauryan rule ca. 200 BC until the Muslim conquest, the major coinage metals of the south had been, with a few notable exceptions, limited to gold and copper, and in the Deccan, gold and lead. Such silver as was captured by Alauddin was not locally produced, but came to South India over the centuries by way of sea trade; the great numbers of Roman *denarii* unearthed are testimony to this process.[13] In this sense the successive Muslim penetrations, capped by the raid on Ma'abar in Alauddin Khalji's reign (AD 1311), brought rather short-term redistributions of silver resources northward. With the revolt of the southern provinces from Delhi control which resulted in the foundation of the Ma'abar sultanate (1336) and Bahmani Sultanate (1347), tribute collections from the south and the Deccan ceased altogether.

This was not immediately reflected in the billon coin curve of *Graph One* from AD 1300 to 1388, where an approximately static output of billon coins in immense quantities is indicated. It must be remembered though that attrition has a significant effect on a static volume of coinage until an equilibrium with silver supplies (from whatever source) is reached (note the silver fineness chart in *Graph One*).

This analysis highlights a vital point, that irregardless of the fiscal health of a treasury, a major currency could not be floated without a regular supply of metal deriving either from internal production or external trade. That the Tughluq treasury held formidable stocks of gold well into the period of decline following Firoz Shah's death is known from descriptions of the booty taken by Timur-i-lang in the sack of Delhi in AD 1399.[14] This notwithstanding, the production of

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p. 38. Moreland feels that the new regimen by which agents of the sultan assessed and collected revenue in cash was a novelty. Presumably the monetization of an in-kind relationship was an integral part of displacing the intermediary classes.

[13] P.L. Gupta, *Roman Coins from Andhra Pradesh* (Hyderabad, 1965), p. 47.

[14] E. Thomas, *The Chronicles of the Pathan Kings of Delhi* (Delhi, 1967)

gold *tankas* declined drastically in the later 14th century. The progressive weakening of political control over the Deccan, signalled by the foundation of the Bahmani sultanate in mid-century, diverted the direct transmission of current gold production away from the north. Conversely, the Deccani sultan Alauddin Bahman Shah (1347–1359) was unable to establish a silver currency until the seventh year of his reign.[15] The pattern of trade was not sufficiently developed along north/south lines to assure the Bahmani sultans of a silver supply. Only through the influence of maritime trade could this be corrected, later in his reign (AD 1354).

The progress of the silver coinage of the Delhi sultanate during the 14th century has been gone into in some detail, the more readily to appreciate, and explain, the concurrent experience of the independent sultanate of Bengal during the same century. Unlike the former state's coinage, the hoard findings of Bengal coinage are regularly and well reported in numismatic literature, and have been gathered into a *Corpus* complete to 1960.[16] These findings are presented in *Graph Two*. Copper coins are limited to the rare issues of late sultans, and are ignored. Gold coins, while issued by most Bengal sultans, are only known from one or two specimens of each type, and are statistically of no importance. Certain cautions are advisable in interpreting this graph,[17] but for our purposes it compares well with the *Graph One* of Delhi coins.

(reprint), p. 171, f.n. 1.

[15] The earliest known date of silver *tanka* is AH 755 Md. Abdul Walikhan, *Bahmani Coins in the A.P.G. Museum, Hyderabad* (Hyderabad, 1964), p. 10, no. 3.

[16] Abdul Karim, *Corpus of the Muslim Coins of Bengal (Down to* AD 1538) (Dacca, 1960).

[17] Findings of buried coins, called hoards or *trouvailles*, provide our best knowledge of the composition of the circulating coinage at the time of accumulation of the hoard. For statistical purposes the ideal hoard would be a true and random cross-section of coins in circulation when the coins were gathered together; this is presumed to be coincident with the time of burial and is signalled by the latest date on coins in the hoard. Factors of selectivity in the making up of the accumulation spoil this randomness, for instance if the owner of the coins chose only high value coins for preservation, or only new coins, or only coins of a favourite type. Aesthetic factors could significantly influence selection. Likewise, the modern reporting of the hoard composition is similarly subject to distorting selectivity; only the unknown, the unusual, or the coins of specific metals or periods might be reported in the literature. This will affect the validity of statistical compilations based on these reported hoards.

A second source of coin data, collections public and private, are to be avoided

Rigorous consideration of the graph would require analysis of the coinage production as a function of the rate of re-coinage, the differential of metal stocks involved in import/export, the differential of metal stocks involved in industrial activities, the differential of metal stocks involved in savings/stockholding, and the rate of production of local metals mines, modified by the constant factor of inadvertent loss.

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as much as possible. Statistical data collected from their holdings will be of limited value since an extreme degree of selection is normally implicit in collection holdings, including an upper limit on the number of coins of each identifiable type held (usually one or two). The lack of validity of statistical extrapolations from this source was explored in the article 'Numismatic Methodology in the Estimation of Mughal Coinage Output,' *Indian Economic and Social History Review*, vol. XIII, July-Sept. 1976, pp. 393–403.

The *Graph Two* is an abstract of the coins published in Karim. He reports both museum and hoard holdings; in fact, every specimen of Bengali sultanate coinage ever reported. The resulting graph must be treated with caution for many reasons, one of which is that the museum holdings cause a variable deviation from the actual curve. To correct this one should exclude museum specimens; they unfortunately make up the bulk of Karim's sample and one must assume that their numbers relate to relative abundance. Secondly, the hoards reported were not buried at regular intervals, so that there is a distorting effect from the attrition due to circulation losses within each hoard, which is not corrected by any regularity of period of hoard dates. Thirdly, the numbers of coins reported are not really sufficient for statistical certainty; the percentage error is higher than = 100 per cent in some cases. A striking example of this error is the rise in *Graph Two* in AH 823: fifty-four of these coins come from a single hoard in which they are the latest date present. Obviously a block of current mint production was included in the hoard prior to burial, in a quantity that bore no relation to the random sample. A check mark shows the revised total for that year if the 54 are excluded.

Finally, the specific specimen-per-year tally caused the exclusion of numbers of undated coins which could not be distributed evenly over known minting dates: the lack of date itself could be a characteristic of the mint product of certain unrepresented minting years. To lessen this error, a five-year totalizing bar chart was superimposed on *Graph One*. Further, an auxiliary graph which averaged the total of published surviving specimens, with and without dates, across the known mint years of each reign, was plotted. This also was related to a five-year totalizing bar chart, showing a fair correspondence (not published here).

Rather unfortunately, until sufficient primary research is undertaken, the *Graph Two* is the only chart of Bengali minting history available, and must suffice for this study. It should be remarked, to balance the *caveats*, that the curve is fairly congruent with a subjectively constructed hologram deriving from the author's experience with numbers of the coins in commercial channels. The graph may be taken as trustworthy as long as a sophisticated degree of exactitude is not expected. It represents, albeit haltingly, the relative production quantities of the silver coinage.

Mathematical models for this analysis do exist.[18] The crudity of our base graph is such that statistical operations are meaningless in the face of the probable margin of error. We can remark however, that due to the total absence of indigenous sources of silver in Bengal (note *Map One*), minting (from bullion), export, industrial uses (such as jewellery fabrication), savings (private hoarding and government stockpiling), and attribution losses in circulation, were all directly dependent on the rate of importation of silver. Presuming that these factors all responded in commensurate and direct proportion to the change in the rate of silver inflow, then *Graph Two* is a rough indicator of the history of silver importations to Bengal in the period ca. AD 1200–1500, subject to certain provisos.[19] Positive slope on the curve (a rising graph) is indicative of precipitate influx of silver. A neutral

[18] For example C.C. Patterson, 'Silver Stocks and Losses in Ancient and Medieval Times,' *The Economic History Review*, vol. XXV, (1972), no. 2, pp. 205–35.

[19] The most serious impediment to this analysis is the re-coinage factor. It was the habit of *sarrafs* (bankers and money-changers) in medieval Bengal to discount old coins to allow for loss of metal through wear and tear. The practice was widespread, distinctive of Bengal, and was probably adhered to by the government in accepting coinage in settlement of revenue demands. The money-changers 'cancelled' old silver *tankas* by defacing them with chisel marks and distinctive punches. Current coin passed at full value; older coins of the current reign were carefully 'shroff-marked' so as not to obscure the issuing sovereign's name, and passed at an initial discount (1–3 per cent); coins of previous reigns were probably demonetized and passed as bullion. This practice encouraged the recoinage of older coins; in fact this was profitable to the government as the mint levied a surcharge on bullion coined, above and beyond mint expenses. This was the Mughal system, and observation of Bengali coinage indicates the system originated there.

The statistical difficulty is that re-coinage is in theory the one factor not dependent on bullion supply, since the stock of coins was in existence and any percentage could be re-coined annually. This would be especially true on the accession of a new king, when the coinage of the previous reign would be discounted *en masse*. While the graph does not confirm this phenomenon before the mid 15th century AD, the accessions of Barbak (1459), Hussein (1493), Nusrat (1519) and Mahmud (1532) are marked by heavy mintages in the first regnal year. As expected, some percentage of this was due to recoinage, but it also seems certain that this re-coinage did not involve the major portion of the existing circulating stock. This is clear from hoard composition, where coins of the accession year are found with earlier coins, and do not form a *terminus ante quem* for each hoard of the late reigns. Furthermore, the coin inscriptions themselves suggest a direct relationship of accessional and exceptionally large coin issues to major bullion inflows. This is discussed in following pages.

slope on the curve (a horizontal graph) is indicative of a rate of influx sufficient to cover the inadvertent loss factor. A slight negative slope on the curve (a falling graph) corresponding to a drop in volume of less than 50 per cent in 35 years, indicates no inflow of silver and normal attrition due to inadvertent losses (based on an attrition rate of 0.02 yr. $^{-1}$x total stock).[20] A precipitate negative slope on the curve, greater than a loss of 50 per cent in 35 years, indicates a net outflow of silver bullion from Bengal during that period.

Applying these observations to *Graph Two*'s upper hologram, and ignoring for the moment the peaks occurring exactly at the boundary of succeeding reigns, as well as the period in which Muhammad Tughluq of Delhi held Bengal (1325–1338), for which information was not as readily available to the compiler, the net silver bullion import/export position of Bengal appears as follows:

AD *1218–1290* Exhaustion of original stock and sporadic importations of bullion on a limited scale not sufficient to maintain the currency in circulation.

1291–1357 Very large net inflow of bullion on a regular basis and on a greater scale than in the previous century.

1358–1366 Net outflow of bullion from Bengal.

1367–1390 Moderate, regular importation of bullion sufficient to offset attrition losses.

1390–1415 Second period of heavy inflow of bullion, subject to sharp fluctuations year-to-year; a disturbed supply.

1416–1429 Second large net outflow of bullion.

1430–1492 Moderate inflow, somewhat sporadic, sufficient to maintain the volume of currency.

1493–1533 Steadily increasing inflow of silver on a very regular basis.

Whatever the alternative interpretations of this most tentative data, it seems justifiable to conclude that coinage production, probably independent of internal factors and responding to external conditions of bullion supply, peaked in the periods bracketing the years 1357, 1415 and AD 1493. *Graph One* shows that the initial period of inflow coincides somewhat with the decline of silver coinage in the Delhi Sultanate, and may have contributed to it by drawing off silver from the Deccan stocks at Delhi. We have already seen however that this

[20] C.C. Patterson, p. 220. The higher value was chosen due to the peculiar conditions in Bengal conducive to outright loss.

decline is accountable by the maintenance of a billon coinage at Delhi, so that we must look elsewhere for at least part of this inflow to Bengal. The 1415 importation occurred after Timur's invasion and local political decline had caused the collapse of Delhi currency and finances and the disturbance of trade routes to western Asia; in this instance the entire inflow must be sought from a source other than Hindustan. The 1493 inflow coincides not only with the somewhat restored and stable economic conditions in Delhi, but also with the period of maximum prosperity of the Malwa and Gujarat sultanates and the kingdom of Mewar. The former two had extensive silver currencies, and the latter control of (relatively) profitable argentiferous lead mines. The period also merges into the arrival of the Portuguese in the east, and all these factors must be considered in seeking a source for Bengali silver in the latest influx.

Although appropriate historical records that could throw light on this problem of bullion supply in the 13th and 14th centuries are lacking, the inscriptions on the Bengali *tankas* go far towards solving the problem. Amongst the initial issues of Ruknuddin Kaikaus is a type bearing the inscription, ' . . . struck at . . . Lakhnauti from the land tax (*kharaj*) of Banga in the year 690 [AD 1291]'.[21] Banga, from which our term Bengal derives, was the geographical name of the delta region and south-eastern Bengal. At this period it was ruled by the independent Hindu dynasty which had lost Gaura to the Muslims.[22] We conclude that a military confrontation left the sultan in possession of silver booty or tribute from which his initial coinage was struck. This would have been drawn from an accumulated stock, since there are no known silver resources in Bengal, and the people of Banga did not use a silver coinage. Banga thus was merely a transmission point for bullion movement. Sea trade was active at this time, with Arab traders in residence at Chatisgaon (Chittagong).[23] Hence any point on the Bay of Bengal or beyond may have been the source of this silver. Likewise, the Hindu states of east Bengal, Tripura and Manipur were candidates for transmission by land.

The expansion of the Bengal sultanate into Satgaon in the south-west on the Orissan frontier in AH 708 (AD 1305) under Shamsuddin Firoz[24] was not reflected in a rise in quantity of coins minted; we may

21 Karim, p. 25.
22 J.N. Sarkar, *The History of Bengal*, vol. II (Dacca, 1948), p. 23.
23 Md. A. Rahim, *Social and Cultural History of Bengal*, pp. 37–47.
24 Karim, pp. 28–9.

presume a lack of silver available for tribute in this quarter. Permanent expansion towards the southeast, with the conquest of Sonargaon and subsequent independent coinage issues by Mubarak Shah (AD 1338–1349), on the other hand, was accompanied by rises in the graph, confirming the availability of silver in this coastal area. Military campaigns against the north brought in stores of silver bullion: Sikandar Shah's initial coinage includes an issue of AD 1358 from . . . *mulk chawalistan 'urf 'arsah kamru* . . . , 'the land of rice, alias the province of Kamarupa'.[25] It appears that the Hindu kingdoms of the Brahmaputra valley were possessed of bullion supplies: the field of potential supply thus expands to include Tibet in the north and Assam in the northeast. This is confirmed by the very large accessional issue of Hussein Shah in AH 899; on some coins the inscription reads ' . . . conqueror of Kamarupa, Kamata, Jainagar and Orissa . . . '[26] Apparently a goodly proportion of this issue derives from tribute or captured silver. We have mentioned as unlikely that this originated to the southwest (Jainagar and Orissa). Orissan chronicles, and the temple records of Puri, show that monetary transactions in that kingdom involved cowry shells and gold ingots exclusively.[27] Therefore Hussein's silver must have come from Kamata and Kamarupa, which had earlier provided Sikandar. Since neither area is a silver producer, the transshipment of silver must have been continuous throughout the period, at least to the extent of making up the earlier losses.

It is important to establish the *direction* of bullion travel, since the Hindu kingdoms on the frontiers of the sultanate soon established their own silver currencies: Tripura (east of Sonargaon) in AD 1464, Ahom (Assam) in 1543, Koch Kingdom (Kamata) in 1555, Kachar (Meghalaya) 1583, and Jaintia (west of Manipur) in 1670. The presumption has been that these peripheral kingdoms derived their silver from Bengal. While this may have been the case in the Mughal period (post 1576), the above discussion shows the probability that prior to the early 16th century, the historical direction of bullion flow was just the reverse.[28]

[25] Ibid., pp. 160–1.
[26] Ibid., pp. 177–8.
[27] And hence the agonies of British-period historians attempting to convert revenue sums from the palm-leaf records, listed in gold *markas*, into rupees. See N.K. Sahu, ed., *A History of Orissa*, pp. 144–5, f.n. 341.
[28] The point of view that silver money gravitated from the Bengal sultanate to peripheral kingdoms is based on the hoards of Bengali silver *tankas* unearthed in

In order to establish the reliability of this analysis, three critical elements have to be identified: as ultimate source of this bullion, a feasible route of transmission from the source to Bengal, and an agent of transmission.

The portion of *Map One* to the east of India shows the known sources of gold and silver in east and south-east Asia. The gold sources, marked with black squares, are both placer (alluvial) workings, mainly along river banks, and lode (vein or outcropping) workings, mainly in underground mines and surface pits. The silver sources, marked by white squares, are restricted to lode workings; native silver cannot withstand oxidation due to weathering. It is not likely that every known modern or formerly worked location is charted; in Yunnan especially it has been remarked that one is never far from where gold is mined. Rather, the distribution of deposits in different areas is suggested. Apart from a concentration of gold sources in the Tibet-Szechuan-Yunnan borderlands, this element occurs throughout South East Asia. It will be noticed that the occurrence of silver is not so widespread, confined in fact to Yunnan and the northern Shah States. In the medieval context, excepting Siberia, Manchuria, Hunan and Japan, there were no alternate Asiatic sources of silver, and only Yannan was within practical distance of Bengal. It is to Yunnanese sources that we must direct our attention.

The metallurgy of precious metal extraction and refinement was known in both the Pyu kingdom of Pagan (Burma) and the Tai kingdom of Nan-Chao (Yunnan) in the 9th century AD. Gold ore was mined

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these latter territories. Inspection of hoard composition permits an alternate interpretation. The great Koch Behar find of 13,500 *tankas*, reported in 1864, contained issues of Balban (1266–1287) to Ghiyasuddin Azam (1389–1410). (Note by R.J. Mitra, *Proceedings of the Asiatic Society of Bengal*, no. 4, 1864, pp. 480–84; corrected and expanded by Edward Thomas, 'The Initial Coinage of Bengal,' *Journal of the Asiatic Society of Bengal*, vol. XXVI, no. 1, 1867, pp. 1–73). The latest coin date in the hoard was AH 799 (AD 1397). Both the Kamrup and Ahom chronicles (*Kamrupar Buranji*: N.N. Acharyya, *The History of Medieval Assam* (Gauhati, 1966), pp. 170–1; *Ahom Buranji* (Calcutta, 1930), tr. G.C. Barua, pp. 49–51), refer to Kamata/Ahom disagreements which drew an invasion by Ghiyasuddin which was ultimately defeated. The kings involved were Shudang of the Ahoms, AD 1397–1407, and Sukranta of Kamata, AD 1400–1415. The engagement must therefore have taken place in the period 1400–1407, which postdates the latest date of the Koch Behar hoard. The treasure was likely to have been part of the expeditionary fund of the Bengal army, lost during the chaos of defeat. Similar stories can be told of other sultanate hoards beyond the Muslim frontiers.

in the Nmai Hka mountains,[29] and alluvial gold dredged from the sands of the Irrawaddy River, both in Burma.[30] Concentration of the ore was by hand-picking, while placer sands were washed on ripple boards.[31] Refinement was effected by treatment with mercury; the amalgam was heated to evaporation point, leaving pure gold.[32] The mercury was widely available from cinnabar deposits. Similar activity was reported form Nan-Chou, both as to lode and placer workings.

Direct evidence of silver mining and smelting is unavailable, but it is known that the Pyu had a coinage of sorts, silver bars 'shaped like a half moon'.[33] These, from surviving specimens, are known to have been without inscription, passing for metal value. Similar silver bars akin to later Chinese 'sycee', in the shape of circular lumps with sunken centers, circulated in Nan-Chao (of which more below) during this period. Primitive refining of silver depended on open hearth furnaces; the remains of these small-scale industries are found throughout the Shan states and Yunnan.[34] Fortunately for the early inhabitants of the area, the predominant silver ore was galena, an argentiferous lead sulphide. Roasting in an open furnace oxidized some of the sulphides into sulphates; a higher temperature caused the oxides to react on the remaining sulphides to produce the metallic lead-silver. A simple cupellation process, widely known to ancient metallurgists, took off the lead as a litharge deposit on a stirring ladle; the remainder was fairly pure silver. The technology was sufficient for the local ores; had sulphates such as anglesite been the sole available ore, a reduction process using blast furnaces would have been necessary. This latter technology was not known at the time, and there is no evidence of its use in the Shan States/Yunnan region prior to 1500.[35]

[29] *Man-shu* of Fan Ch'o, *c.* AD 865 8v., 29v., 32v. Quoted by G.H. Luce and Pe Maung Tin, 'Burma Down to the Fall of Pagan', *Journal of the Burma Research Society*, vol. XXIX, no. 111, 1939, p. 270.

[30] Ibid., 8v., 9v., 29v., etc.

[31] J. Coggin Brown, 'The Mines and Mineral Resources of Yunnan', *Memoirs of the Geological Survey of India*, vol. XI, VII, 1923, p. 149.

[32] Ibid., p. 155.

[33] G.H. Luce and Pe Maung Tin, p. 270.

[34] Watson and Fedden, *Journal of the Salween Expedition, 1868*, p. 10 and p. 39, quoted by R.C. Temple, 'Notes on Currency and Coinage Among the Burmese,' *Indian Antiquary*, July 1928, pp. 129–30.

[35] T.D. Latouche and J. Coggin Brown, 'The Silver-Lead Mines of Bawdwin, Northern Shan States', *Records of the Geological Survey of India*, vol. XXXVII. pt 3, 1908–9, pp. 245–6.

The knowledge of both gold and silver mining and smelting was widespread in Yunnan during the period of our study, and not necessarily held only by the high cultural groups; there are innumerable references to the 'Gold Teeth', an Austric-speaking aboriginal group which was noteworthy for the gold and silver cappings or dentures sported by its members.[36] Whether this precious metal was obtained in trade, war, or by industrial effort in uncertain, but the latter is not impossible considering the tribe's relative isolation and the wide extent of the custom.

Once it is established that silver production was both feasible and actual in eastern Burma and southwest China by the 13th century AD, routes of trade and communication over which silver resources could pass westward must be investigated. In particular we must identify the land and water routes which connected south-western China with the frontier areas of Bengal which served as entry-points for this metals movement: Kamarupa in the northeast, Tripura/Sylhet in the east and Chittagong/Arakan in the southeast. It is manifest that land routes exclusively were associated with Kamarupa and Tripura, while a combination of land and sea routes communicated with Arakan. In assessing the relative importance of the various routes it seems to me important to avoid the overemphasis on ocean carriage which is common in the literature on the period. Both modes of transportation, land and sea, were used to advantage in the 13th and 14th centuries in South and East Asia. Unfortunately an imbalance in historical resources makes it difficult to establish perspective vis-à-vis the respective utility of these transport modes. While Chinese and Portuguese sources give detailed accounts of oceanic trade in the Bay of Bengal late in this period (Ma Huan and Tome Pires), no such exhaustive chronicles seem to be available for the overland trade a Tibet and Burma during the same era. Each age and geographical area has its distinctive, predominating conditions. While sea trade was a major channel for the transmission of money and/or bullion into medieval Bengal, it cannot be considered *a priori* that it was the exclusive, or even dominant, means of supply.

Previous to the exploitation of Tyrolean, Japanese and Peruvian silver, the stock of available silver in the medieval world was much smaller, and its value relative to non-metallic goods commensurately

[36] Luce, p. 270; Padmeswar Gogai, *The Tai and Tai Kingdom* (Gauhati, 1968), p. 167; Marco Polo (tr. Henry Yule) chapter L. 'Zardandan,' para 2.

greater than in either the ancient or modern periods. Patterson has made this observation of the 'European and Muslim worlds' ca. 800 AD, estimating the per capita quantity of silver as being 15 grams, versus 100 grams in the Roman world and 164 grams in the 20th century U.S.A.[37] This is probably true of Muslim India ca. 1200–1500; a selection of items priced in terms of silver mass during the time of Alauddin Khalji (ca. 1305) and Akbar (ca. 1595) in Hindustan, shows an absolute rise in prices (i.e. drop in silver value).[38] In other words, a lesser quantity of silver was capable of supporting an equivalent volume of trade in the earlier period.

The high value of the exchange medium helped to make land transit a competitive, if not superior, means of trade communication in this period. Merchants made transport-mode decisions based on capacity of carrier, speed of carriage, and security of cargo. The vast mercantilist silver bullion shipments of the 17th-18th centuries were most readily transported by sea, especially when sea routes were secured to the transporting nations and alternate routes via land were inordinately long and risky. There was no equivalent security of sea in the earlier period; the lesser quantities of bullion required in trade were equally portable by pack horse train as by ship; and whenever conditions of peace enforced by armed authority prevailed, land travel became relatively more attractive. This is specifically true in a consideration of bullion and coinage movement from the South China Sea to the Bay of Bengal; in this instance given tenable conditions, transit by land was competitive with the water mode. Sufficient cause for merchant caution is demonstrable. The fate of Muhammad bin Tughluq's embassy to China has been related to us by his ambassador Ibn Battuta: the carriers, Chinese junks, were shipwrecked while departing the Malabar port of Calicut.[39]

In the particular case of bullion shipments from Yunnan, maritime

[37] C.C. Patterson, p. 216.

[38] In 1305, Delhi: rice 5 *jital/man* = 0.11 g Ar/Kg rice (1 *jital* = 0.29 g Ar; 1 *man* = 13.1 Kg)

1595, Agra: rice.95 *dam/man* = 1.05 g Ar/Kg rice (1 *dam* = 0.28 g Ar; 1 *man* = 25.2 Kg)

1304, Delhi: *ghee* 1 *jital*/2 1/2 *sers* = 0.13 g Ar/Kg *ghee* (1 *ser* = 0.87 Kg)

1595, Agra: *ghee* 105 *dam/man* = 1.17 g Ar/Kg *ghee*

1305, Delhi: horse 65–120 *tanka* ea. = 715–1320 g Ar/ea. horse

1595, Agra: horse 10–30 *mohurs* ea. = 1065–3195 g Ar/ea horse (1 *mohur* = 9.4 rupees)

[39] H. Yule, *Cathay and the Way Thither*, vol. II, p. 419.

routes had to meet very strong competition from overland transportation. As noted, the quantities of bullion were modest prior to 1500: relatively valuable shipments weighed little and could be carried by animal power as readily as by flotation. As late as the 20th century, observers in Yunnan noted the everpresent mule trains used in metal shipments in the area.[40] This mode of transport is eminently well suited to negotiating narrow tracks in mountainous terrain, living off the fodder to be had along the trail. It is still a dominant method of goods carriage in Nepal.

Secondly, a Mekong-Gulf of Tonkin sea route to Bengal involved roughly 5,300 km of navigation by country boats and ocean going vessels, versus some 2,000 km of land and sea travel by the route via Pegu and Chittagong, or only 1200 km of overland travel via Burma. Even given the swift descent of the Mekong (and ignoring the barriers of rapids), this route would have taken an excessive length of time, and only been practicable during those seasons when favourable winds encouraged sea travel. More to the point, as will be discussed later, the nature of trade was such that local increments were as important as the long range commerce. Major commercial expeditions out of south China in the Yuan and early Ming dynasties were supervised by government and well regulated; further, they did not originate in Annam itself.[41] At any rate trading in metals, precious or otherwise, was prohibited.[42] The tendency from Annam would therefore have been coastal trade with South-East Asia, where silver especially would be quickly absorbed in those gold-rich and silver-poor markets. In contrast, the mechanism of silver exchange in the Burma land trade, to be discussed below, favoured transmission to the markets of eastern India.

As to the issue of security of transit, the relative perils of storm and pirates at sea are difficult to gauge against landslides and bandits on land. When discipline was imposed along the trails of Burma and Yunnan, as happened during the later 13th-15th centuries by the Mao-Shan empire, the balance of economy and security would seem to have been more evenly distributed between the maritime and terrestrial transit modes.

The roads from China to India through this area were well

[40] Coggin Brown, ' . . . Yunnan', p. 153.

[41] Yuan Shih, tr. H.F. Schurmann, *Economic Structure of the Yuan Dynasty*, chapter XIII, pp. 230 ff. (94. 24a9–27a2).

[42] Ibid., p. 227 (Item 14).

travelled from the earliest times. They were three in number, all radiating from the city of Yung Chang Fu (see *Map One*). This place was the road terminal for the routes from north China via the Yangtse valley; from south China via the West River; and from Tonkin via the Red River.[43] The main stages of the ancient paved roads within Yunnan, starting from Yannan Fu, were Yunnanhsien, Tali Fu, and Yung Chang Fu. The roads west from this last staging point were in operation by the 7th century AD[44] and may have been in use as early as the first millennium BC.[45] The divergent routes passed via Upper, North Central and Middle Burma to equivalent entry points in Bengal proper. The first went from Yung Chang to Momien, crossed the Irrawaddy to Mogaung, went north through the Hukong Valley, across passes in the Patkai Range, to the upper Brahmaputra valley. This was the eastern frontier of Kamarupa. The second route followed the Shweli River, crossing the Irrawaddy at Tagaung, followed the Chindwin River north and crossed via the Imole pass to Manipur. This was eastern approach to Bangala via Tripura. The third route embarked on the Irrawaddy at Tagaung, Ava or Pagan, then passed from Prome over the Arakan Range to Arakan. A variation of this, went directly from Pagan to Arakan via the Aeng pass. This gave access to either a land route northwards to Chatisgaon, or embarkation on the coastal trading boats to Bangala.[46] Numerous combinations of these routes were possible using different stretches of the Irrawaddy for navigation. A separate apparently well-travelled and renowned route led from the region of the upper Yangtse-Mekong-Shalween rivers through Tibet. Passes led through Bhutan and Nepal into Kamarupa and Hindustan respectively. The Tsangpo-Indus route led to Central Asia via either Bactria or Khotan. As in all overland travel in the medieval period, while embassies and individuals might journey from one end of a road to the other, it was not necessary for merchants to do so. Goods passed

[43] Coggin Brown, ' . . . Yunnan', pp. 19–24.

[44] According to the geography of Kua-ti Chin' (AD 642), quoted by H.B. Sarkar, 'Bengal and Her Overland Routes in India and Beyond', *Journal of the Asiatic Society of Calcutta*, vol. XVI, 1974, pp. 110 ff.

[45] Ibid., p. 104. Also Lallanji Gopal, *The Economic Life of Northern India, ca.* AD 700–1200 (Delhi, 1965), pp. 109–110.

[46] Sarkar, p. 111. Gopal, pp. 109–110. S.E. Peal, 'Note on the Old Burmese Route over the Patkai via Nongyang', *Journal of the Asiatic Society of Bengal*, no. 2, 1897, pp. 69–82. R.B. Pemberton, *Report on the Eastern Frontier of British India*, p. 41 and p. 107.

through a series of hands in an entrepot trade, responding not simply to long-distance demands but the complex patterns of local exchange.

It is appropriate to inquire into the political conditions which reigned over this area during the period of this study.[47] Yunnan in AD 1200 was under the government of the Tai kingdom of Nan-Chao, with the capital at Tali. The Tai were a people vaguely related racially to the Han Chinese, and possessed of a culture significantly more advanced than the Lawas, Palaungs and Kachins of the area. They were literate, keeping historical records in a script of Indian derivation, and administering their state through ministerial government. The officers of the realm were assigned land revenue and the standing army was raised by levy. Taxes were payable in grain and in specie. This latter consisted of undifferentiated silver alloy ingots.

Beyond the borders of Nan-Chou was a losely associated grouping of Tai states from Sukhotai (central Thailand), Lannatai (Chieng Mai), Laos (Vieng Chan), Monei (Southern Shan States), Mong Mao (Northern Shan States), Tagoung (Upper Burma), Male (on the Chindwin) to the Ahom (upper Assam). These had been peopled by successive waves of Tai emigrants forced out of Yunnan by Chinese pressure as early as the 6th century BC. Culturally related but mutually jealous, they were independent of Nan-Chou. Under Hso Hkan Hpa (1220–1250), the armies of Mong-Mao had brought to submission every Tai state in a broad swath from Chieng Mai in northern Thailand to Assam, creating vassals of Manipur, Tripura and the Nagas in India, and overthrowing the northern provinces of Pagan.

Nan-Chou itself was unable to affect this movement, for relations with the Chinese were deteriorating. Nominally subject to the Chinese emperor, Nan-Chou as a frontier state had maintained cordial diplomatic and trade relations with the Sung dynasty. The conquest of China by the Mongols brought the Tais into conflict with the new overlords. Successive military expeditions by the Mongols in 1245 and 1252/53 eventually reduced the capital of Tali and the state became a Mongol province. This induced a great migration south and west into neighbouring Tai states, and confirmed Mong Mao on the Shweli River as predominant center of the Tai race. Elements of the Nan-chao govern-

[47] The historical survey following is distilled from Gogoi, M. Carthew, 'The History of the Thai in Yunnan', *Journal of the Siam Society*, vol. XL, pt 1, pp. 1–38; N. Elias, *Introductory Sketch of the History of the Shans in Upper Burma and West Yunnan* (Calcutta, 1876).

ing classes found their way into many of the Tai principalities, and the consequent spread of administrative skills was noticeable in later principalities as wide ranging as the Ahom kingdom in Assam and Ayudhya on the Gulf of Siam (founded 1350).

The Tais (or Shans, as they are called in Burma) avoided direct confrontation with the Chinese, who began with an initial foray in 1277 the invasion of Pagan. Campaigns from Yunnan in 1283 and 1287 destroyed the Pagan kingdom, demonstrating, incidentally, the full capacity of the road system. The Shans abided their time, until in 1301, freed from any Burmese threat, they defeated the last Chinese expedition to attempt the permanent occupation of Burma. From this date until the 1440s the Tai states were essentially free from hostilities with the Chinese. The decline of the Yuan dynasty in the mid-14th century even permitted the Tais to temporarily regain control of Yunnan as far as Tali. This period was thus one essentially of tense peace on the major lines of contact with both the Ming Chinese and the Ava Burmese. This is not to say of course that there was any political unity or tranquility in the modern sense within the Tai dominions. Rather there existed that state of intertwined co-operation and competition, of alternating amity and rivalry in the commercial and political spheres, not unlike that obtaining in contemporary Italy. The unity underlying dynastic jealousies and the extent of intercourse between Tai states was demonstrated by the marital alliances with Burmese Shans undertaken by the Ahom rulers in Assam centuries after settlement in that country. An anecdote is told of a jewelled plaque forming part of the royal vestments of the Ahom king, which, when inspected in 1912, was found to bear legends placing its origin in Chieng Mai (northern Thailand) in AD 1408.[48]

Of course it is not necessary to insist that the Pagan dynasty preceding Shạn dominance, or the Ava dynasty following, were not capable of providing the essential link in this trade network. However it is enough for our purposes to demonstrate that the Tai or Mao-Shan kingdoms were a sufficient bridge between the south Chinese and eastern Indian worlds; if others functioned, all the better.

Among the strengths of the Tai or Mao-Shan states was their control and exploitation of gold and silver resources. The Hsi Wi Chronicle relates the 'gold and silver fields' located in the environs of Mong Mao in the time of the conqueror Hso-Hkan-Hpa (1220–

[48] E. Gait, *A History of Assam*, 3rd ed. (Calcutta, 1963), f.n. p. 75.

80).[49] *Map One* confirms the known silver-bearing sites in the Mong-Mao region, most notably at Bawdwin. One species of ingot which circulated amongst the Tais was known as 'Shan shell-money' to the British. This 'money', which was reported circulating in Thailand and among the Lao States, was traced to the Bawdwin mines, where it was found to be the natural end product of cupellation refining.[50] The Bawdwin workings are of unknown antiquity, one estimate placing their discovery in the 10th century.[51] The mine site, a series of outcroppings of galena, exhibits signs of continuous working over a great period of time, with roads, stone bridges, settlements, fortifications and burial grounds in addition to the industrial remains. The hills for several miles around are permanently denuded of vegetation and badly eroded, the result of centuries of sulphurous fumes from open ore roasting furnaces.

This was the main silver source of the Shans; in fact the very name 'Bawdwingyi' means 'Great Silver Mines'. It remained in Tai hands until the early 15th century. An inscription in Chinese found at the site records the start of operations by the Ming dynasty in AD 1412.[52] It was worked until 1858 by the Chinese, reopened this century by the British and became the greatest silver mine in the British Empire. It is difficult to estimate the amount of silver that might have been recovered annually by the Tais in the 14th and Chinese in the 15th centuries. The production in 1973 was 21,306 kg of silver;[53] in 1827, 18,000 kg;[54] and the average production for the 450 years of Chinese occupation (estimated from the visible slag heaps) was 3,300 kg annually.[55] Another site closer to the Shweli shows signs of early working, but had not been thoroughly surveyed by the time this information was compiled. Assuming a more dilatory exploitation during the earlier period, the Shans may have extracted 1,000 kg of

[49] Cited by Gogoi, p. 184.

[50] R. Temple, 'Notes on Currency and Coinage among the Burmese', *Indian Antiquary*, May 1928, pp. 91–2.

[51] C.H. Henniker, *Mining Journal*, vol. LXXIX, p. 52.

[52] Coggin Brown, 'Geology and Ore Deposits of the Bawdwin Mines', *Records of the Geological Survey of India*, vol. XL, VIII, (1918), p. 124.

[53] U.S. Bureau of Mines, *1973 Minerals Yearbook*, Chapter on Burma.

[54] J. Crawfurd, *Journal of an Embassy to the Court of Ava* (London, 1829), p. 444. His estimate was £120,000.

[55] A.B. Calhoun, 'The Bawdwin Mine, in Burma', *Engineering and Mining Journal Press*, vol. 113, no. 25, (24 June 1922), p. 1089. He estimates 1,000,000 tons of ore at 43 oz. Ar per ton.

silver annually from the two mines. This would have been equivalent to roughly 100,000 *tankas* per year of Bengali money.

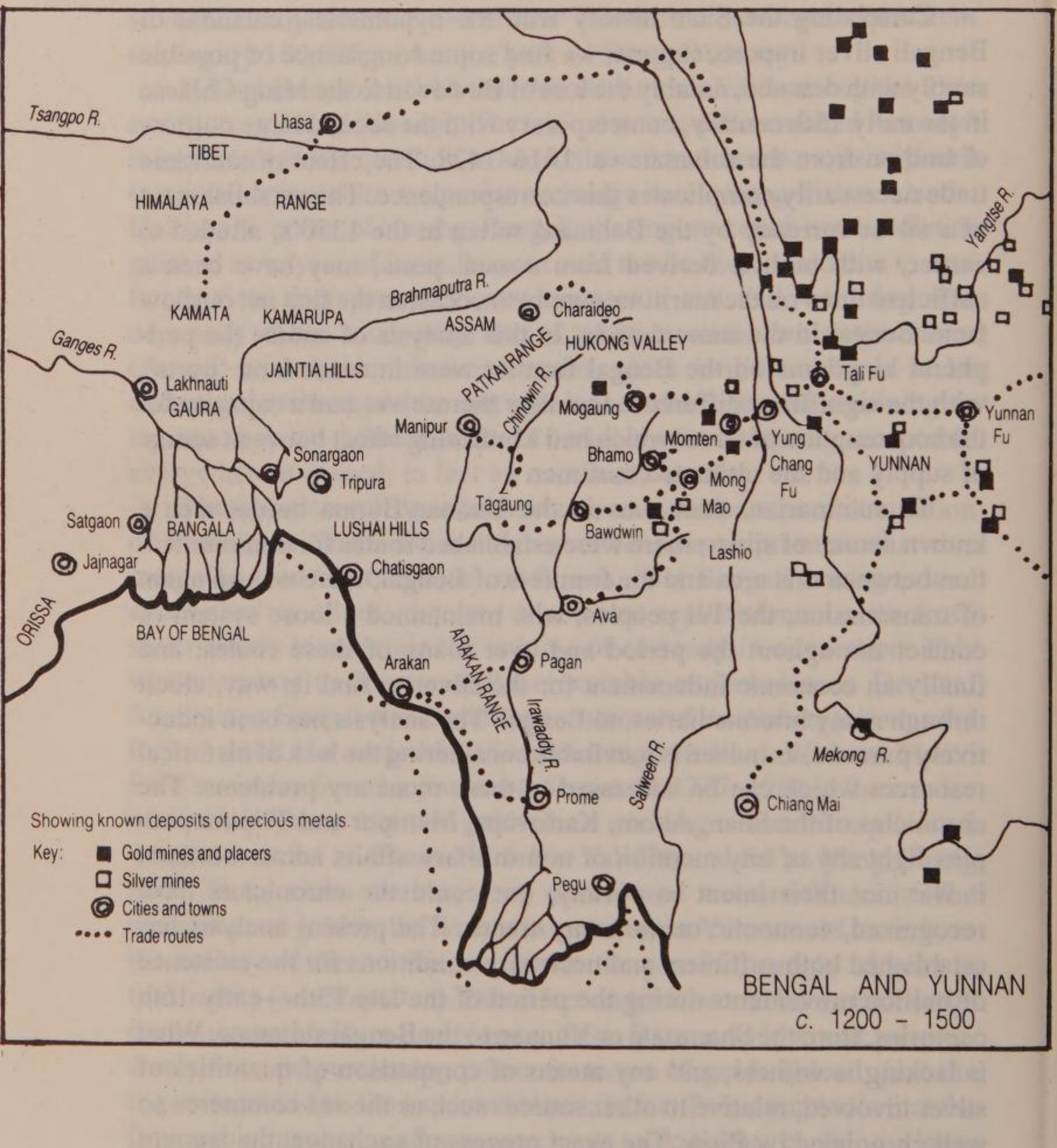
It has been established that this silver circulated among the Tais as ingots or 'shell money'. The use of a non-differentiated 'money' is important to the question at hand, since unmarked bars, as opposed to minted coins, were a superior exchange item in long-distance trade. Unlike the coins of nearby Bengal, the ingots could not be distinguished as to year of issue; hence could not be discounted due to age. Every time they passed to new owners a test and weighing was necessary. This anonymity was a positive virtue when the silver crossed several administrative zones, since it did not have to be exchanged to be made current specie, nor did it require recoining as it passed beyond the boundaries of the issuer. It was equally acceptable everywhere it passed; in fact an excellent traveller.

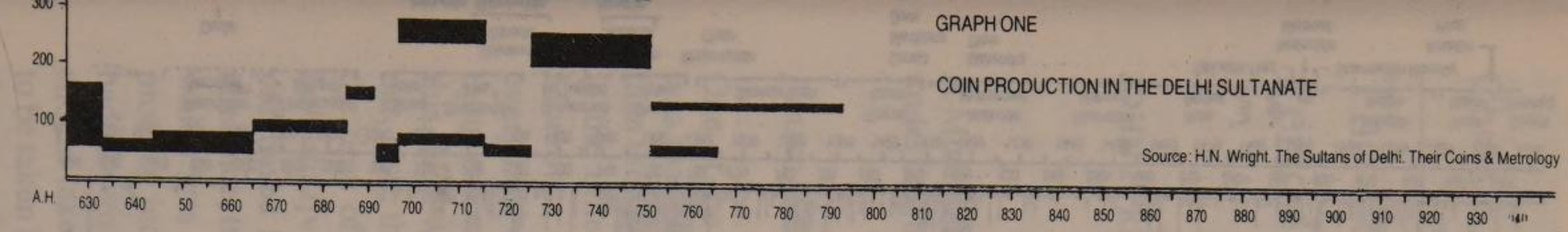
The question still remains however as to the pattern of circulation of this silver. There are a number of reasons to presume that this money moved westward out of Burma. The Bengali coinage, once established in silver, required a constant replenishment with fresh silver stocks to maintain the volume of currency in circulation. This was necessary to counteract the inexorable attrition losses. Demand for silver in Bengal was therefore constant and insatiable; this was the logical result of a successful silver exchange medium. We have Marco Polo's witness from his journey to Pagan ca. 1277–1281 in the service of Kublai Khan, that the gold-silver exchange rate for equivalent weights was 8:1 at Yunna Fu, 6:1 at Tali Fu, and 5:1 at Yung Chang Fu.[56] These cities were in east, central and western Yunnan. The cheapness of gold in the west was not due, as Yule would have it, to the naivety of the inhabitants, but to the plentiful supply of gold in the locality (see *Map One*). The effect on trade would be to discourage the transport of silver into Yunnan from Burma, as it would progressively lose its purchasing power in terms of gold. Indeed, just the opposite would be the expected result; in fact Polo comments that the favourable rate ' . . . induces merchants to go thither carrying a large supply of silver to change among the people . . . they make immense profits by their exchange business in that country [Burma]'.[57] In this case it is clear that Burmese silver did not find its way east, at least at the end of the 13th century; and in addition we must allow for the volume of Yunnanese silver flowing west speculatively.

[56] *The Book of Ser Marco Polo*, tr. H. Yule, vol. II, pp. 53, 62, 70.
[57] Ibid., p. 70.

Correlating the Shan history with the hypothetical calendar of Bengali silver imports/exports, we find some congruence of possible supply with demand, notably the loss of Bawdwin to the Ming Chinese in the early 15th century, contemporary with the second large outflow of bullion from the sultanate ca. 1416–1428. The effect of maritime trade necessarily complicates this correspondence. The establishment of a silver currency by the Bahmani sultan in the 1350's, alluded to earlier, with bullion derived from coastal ports, may have been a sufficient draw on the maritime supply to occasion the first net outflow from Bengal in the same decade. In this analysis of course the peripheral kingdoms on the Bengal frontier were in sense land 'ports', with the significant difference that they themselves had a capacity for the consumption of silver which had a buffering effect between source of supply and the ultimate consumer.

To summarize, there was in the Yunnan/Burma border area a known source of silver; there were established routes for communication between this area and the frontiers of Bengal; there was an agent of transmission, the Tai peoples, who maintained a loose system of contact throughout the period and over many of these routes; and finally an economic inducement for the silver to find its way, albeit through many intermediaries, to Bengal. The analysis has been inductively pursued, as indeed is inevitable considering the lack of historical resources which can be addressed to these monetary problems. The chronicles of the Shan, Ahom, Kamarupa, Manipur and Tripura peoples fight shy of any mention of non-military affairs across borders; it was not their intent to portray, nor could the chroniclers have recognized, economic or monetary trends. The present analysis has established both sufficient and necessary conditions for the existence of bullion movements during the period of the late 13th—early 16th centuries, from the Shan state or Yunnan to the Bengal sultanate. What is lacking is witness, and any means of comparison of quantities of silver involved, relative to other sources such as the sea commerce so well chronicled by Pires. The exact process of exchange, the amount of bullion involved, the mechanisms and products of trade which would provide the flesh for this analytical skeleton are still to be researched.

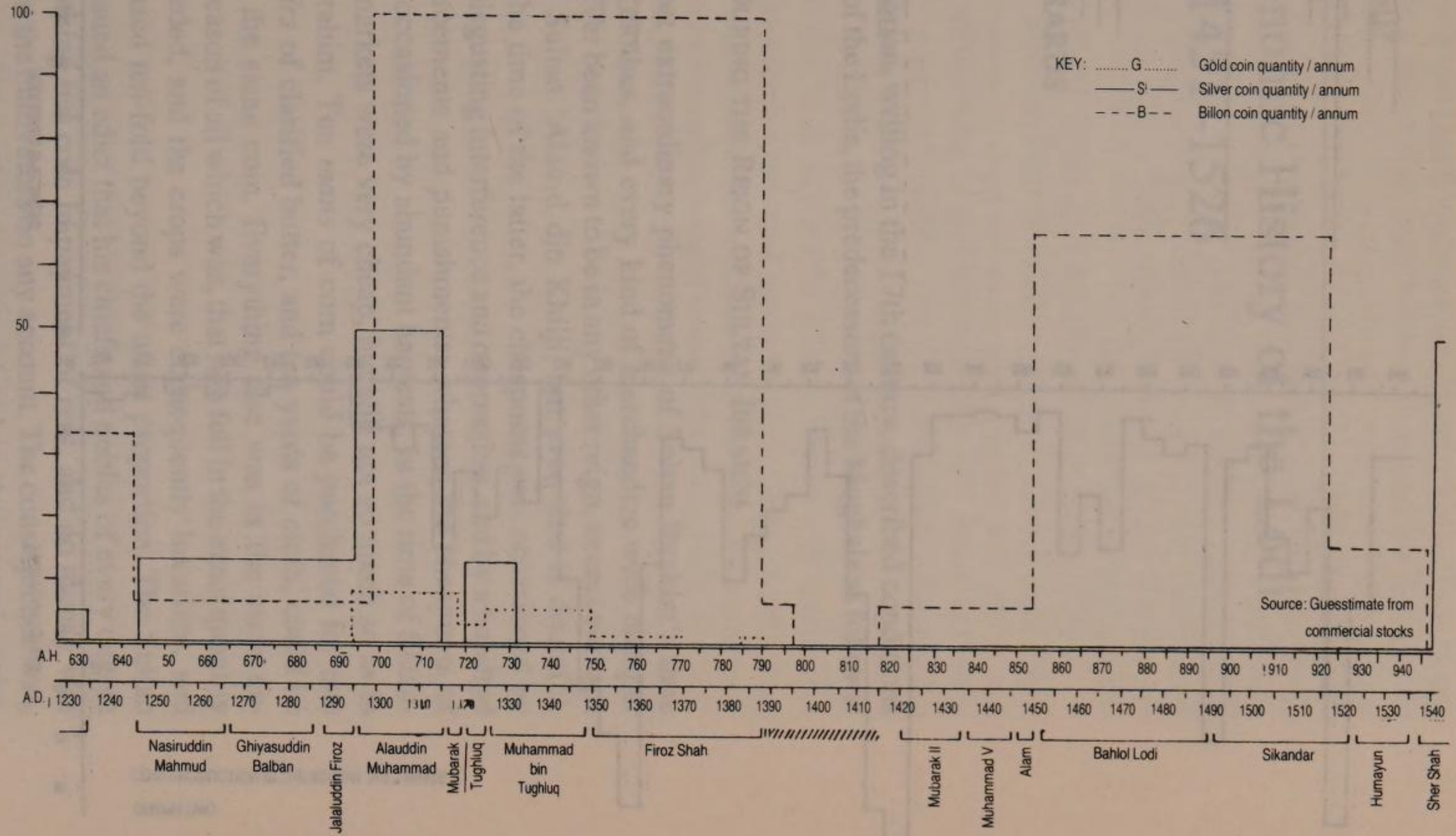

Tsangpo R.
Lhasa
TIBET
HIMALAYA
RANGE
KAMATA
KAMARUPA
Brahmaputra R.
ASSAM
Charaideo
Ganges R.
JAINTIA HILLS
PATKAI RANGE
HUKONG VALLEY
Lakhnauti
GAURA
Chindwin R.
Manipur
Mogaung
Momten
Bhamo
Mong Mao
Yung Chang Fu
Tali Fu
YUNNAN
Yunnan Fu
Yangtse R.
Sonargaon
Tripura
Tagaung
Bawdwin
Lashio
Satgaon
BANGALA
LUSHAI HILLS
Jajnagar
Chatisgaon
ORISSA
BAY OF BENGAL
Ava
Arakan
ARAKAN RANGE
Pagan
Irrawaddy R.
Salween R.
Mekong R.
Prome
Chiang Mai
Pegu
Showing known deposits of precious metals.
Key:
Gold mines and placers
Silver mines
Cities and towns
Trade routes
BENGAL AND YUNNAN
c. 1200 – 1500



GRAPH ONE

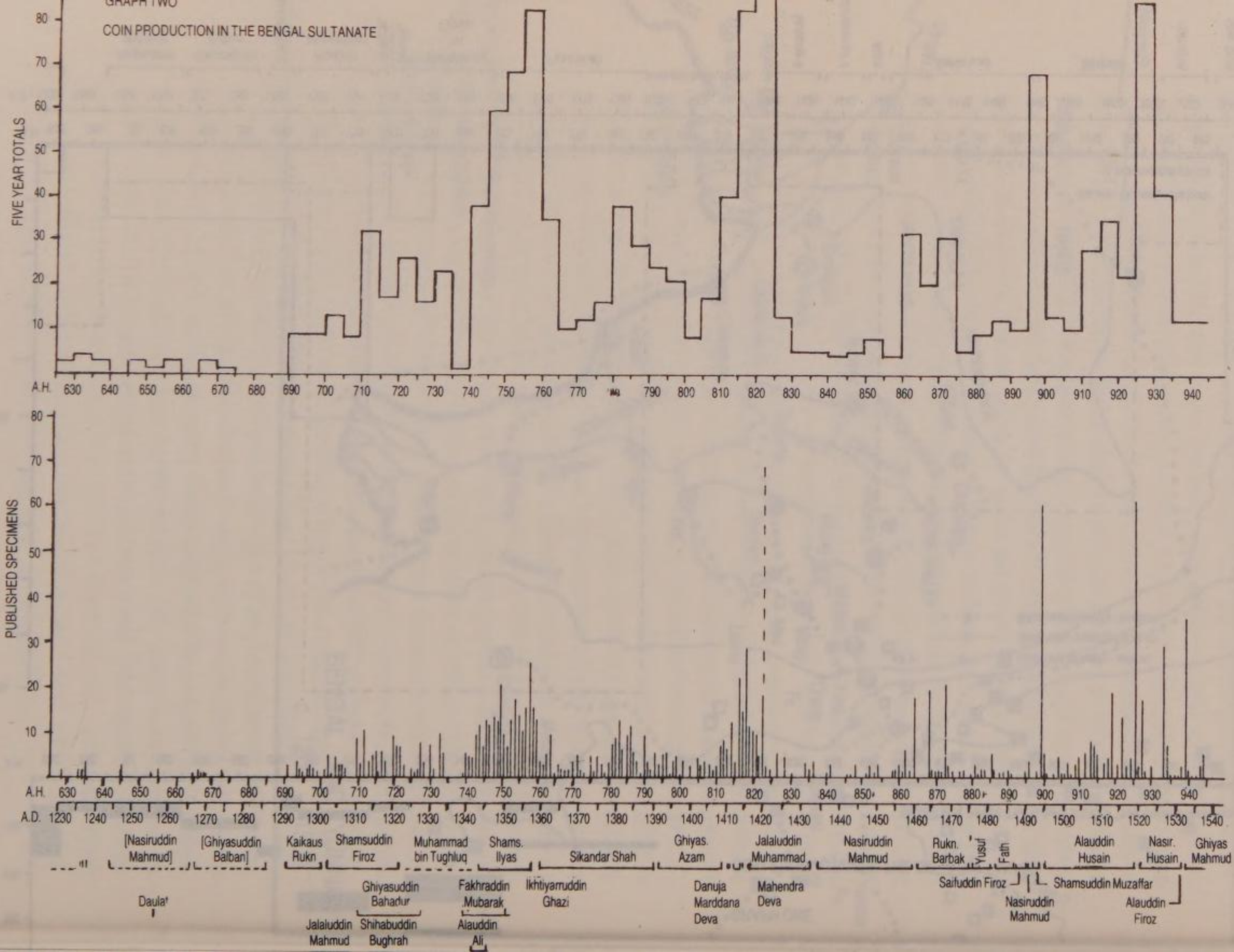
COIN PRODUCTION IN THE DELHI SULTANATE

Source: H.N. Wright. The Sultans of Delhi. Their Coins & Metrology


100
50
KEY: ..... G ..... Gold coin quantity / annum
—— S —— Silver coin quantity / annum
– – – B – – Billon coin quantity / annum
Source: Guesstimate from commercial stocks
A.H. 630 640 50 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940
A.D. 1230 1240 1250 1260 1270 1280 1290 1300 1330 1340 1350 1360 1370 1380 1390 1400 1410 1420 1430 1440 1450 1460 1470 1480 1490 1500 1510 1520 1530 1540
Nasiruddin Mahmud
Ghiyasuddin Balban
Jalaluddin Firoz
Alauddin Muhammad
Mubarak
Tughluq
Muhammad bin Tughluq
Firoz Shah
Mubarak II
Muhammad V
Alam
Bahlol Lodi
Sikandar
Humayun
Sher Shah

GRAPH TWO

COIN PRODUCTION IN THE BENGAL SULTANATE



Chapter Four

The Economic History of the Lodi Period: 1451–1526

JOHN F. RICHARDS

A Muslim historian, writing in the 17th century, described conditions under the rule of the Lodis, the predecessors of the Mughals as follows:

Abundance During the Reign of Sultan Ibrahim

One of the most extraordinary phenomena of Sultan Ibrahim's time was that corn, clothes, and every kind of merchandize were cheaper than they had ever been known to be in any other reign, except perhaps in the time of Sultan 'Alau-d din Khilji; but even that is doubtful. Moreover, in the time of the latter, the cheapness was occasioned by every kind of disgusting interference and oppression, and by a hundred thousand enforcements and punishments; whereas the cheapness of this reign was occasioned by abundant harvests. In the time of Sikandar, also, the markets were very cheap, but still not so much so as in the time of Ibrahim. Ten *mans* of corn could be purchased for one *bahloli*; five *sirs* of clarified butter, and ten yards of cloth, could be purchased for the same coin. Everything else was in the same exuberance; the reason of all which was, that rain fell in the exact quantity which was needed, and the crops were consequently luxuriant, and produce increased ten-fold beyond the usual proportion. The Sultan had likewise issued an edict that his chiefs and nobles of every degree should take nothing but corn in payment of rent, and no money was to be taken from the cultivators on any account. The consequence was, that countless quantities of grain accumulated in the several *jagirs*,

and as ready money only was necessary for maintaining the personal expenses of the nobles, they were eager to sell their grain at any price which was procurable. The abundance of God's blessings reached such a height, that ten *mans* of corn would sell for a *bahloli*. Gold and silver were only procurable with the greatest difficulty. A respectable man with a family dependent on him might obtain wages at the rate of five *tankas* a month. A horseman received from twenty to thirty as his monthly pay. If a traveller wished to proceed from Delhi to Agra, one *bahloli* would, with the greatest ease, suffice for the expenses of himself, his horse, and escort.[1]

This passage, from the *Tarikh-i Daudi* of Abdulla, is of critical importance for the economic history of the late Delhi Sultanate. It is one of the few lengthy references we have to economic conditions under the Lodis. The sentence referring to gold and silver has greatly influenced scholars studying this period. They have interpreted the chronicler's remark as a clear-cut statement that there was a physical shortage of precious metals in the Lodi territories at this time. Other indications of a specie scarcity which also exist reinforce this interpretation. No gold or silver coins have been found of the types and denominations that earlier dynasties normally minted at Delhi. Instead Buhlul Lodi (1451–1489) issued large numbers of mixed-metal coins containing a small proportion of silver to copper (termed billon). These less-valuable *buhlulis* replaced the gold and silver *tankas* that were the customary coinage of the earlier Sultans of Delhi. From the debasement of the coinage and the reference to the fact that 'Gold and silver were only procurable with the greatest difficulty'. Modern historians have concluded that there was an abnormal shortage of precious metals in the interior of North India in the latter half of the fifteenth and early part of the sixteenth centuries. And they have further hypothesized that this shortage may have been a major cause of the other economic conditions known to us.

In the *Oxford History of India*, V.A. Smith argued that the specie shortage, combined with the effects of abundant harvests, drastically depressed prices:

> The reign of Ibrahim was even more remarkable than that of his father for the extreme lowness of prices, due partly to copious rain followed by abundant harvests, and largely to the want of metallic currency. We are told that 'gold

[1] Sir H.M. Elliot, *The History of India: As Told by its Own Historians* (London, 1872), v. 4, p. 476.

and silver were only procurable with the greatest difficulty', and that sellers were ready to offer the most extravagant quantities of produce for cash.[2]

Somewhat later W.H. Moreland, in his work on the Islamic agrarian systems in India, point out that in addition to its effect on low prices the shortage of precious metals may have been the reason for Ibrahim's order that his 'chiefs and nobles of every degree should take nothing but corn in payment of rent'. Inadequate supplies of specie could have been 'the decisive factor in the decision to change the method of payment'. Great hardships would have been created among the peasantry and smaller assignees if the administration had continued to demand cash for the payment of the land tax in the face of a shortage of money.[3]

But any explanations of the reasons for this shortage of gold and silver have been only assumptions. In his early work on the coins of the Delhi Sultans, Edward Thomas referred to the economic consequences of Timur's sack of Delhi in 1398. He felt that the treasure lost in this episode was never replenished by the later rulers at Delhi:

> Timur had effectually ruined the land through which his plundering hordes had passed—what his followers could not carry away they destroyed and while the distant provinces retained their wealth the old capital [Delhi] and all around it was impoverished to desolation; . . .[4]

Smith, relying on Thomas' explanation, commented: 'Timur's invasion, apparently, must have produced tremendous economic effects, which have been very imperfectly recorded. Gold and silver seem to have been still abundant in the time of Firuz Shah Tughluq, before Timur's operations'.[5]

W.H. Moreland has observed that the political conditions of the 15th century after Timur's invasion may have limited access to the usual sources of precious metals for the Lodi Sultans. In the 13th and 14th centuries most of the treasure acquired by the Delhi Sultans came in the form of booty or tribute from the two coastal provinces, Bengal and Gujarat. Very little gold or silver could be mined in North India. Therefore specie had to be imported—either by trade or conquest.

2 V.A. Smith, *The Oxford History of India* (London, 1958), 3rd ed., p. 263.
3 W.H. Moreland, *The Agrarian System of Moslem India* (Cambridge, 1929), pp. 68–9.
4 Edward Thomas, *The Chronicles of the Pathan Kings of Delhi* (London, 1891), p. 436.
5 Smith, p. 263.

Periodically influxes of gold and silver resulting from raids in the Deccan supplemented the normal revenues from the coastal trading ports. In the late 15th century these supply lines no longer existed. Bengal and Gujarat no longer paid tribute to Delhi, and the Lodis were not strong enough to successfully attack the South. And, Moreland continued, by this time the fragmented political conditions of the time had cut off even the normal trade channels from the coast to the interior. Incessant warfare and 'lawlessness along the roads' discouraged both private and royal trading ventures. Under these circumstances the rulers of the Delhi kingdom were financially crippled.[6]

By combining the views of Smith, Thomas, and Moreland we have arrived at what seems to be the accepted interpretation of the unusual economic features of North India under Lodi rule. The shortage of precious metals is a key element in this interpretation. It has been argued that this shortage not only helped to lower prices but that it was responsible for the shift from cash payment to that in kind in the Lodi agrarian system and that it was also responsible for the disappearance of gold and silver issues from the Lodi coinage. But against this the present writer will show in the remainder of this paper that there could not have been any scarcity of precious metals in North India at this time. Despite the devolution of the Delhi Sultanate into warring regional units, normal trade continued in the 15th century as it always had in North India. The Lodi Sultans may have had monetary difficulties but these can be explained by the decentralized, tribal nature of their administrative and political system. The administration set up by Buhlul Lodi, based on blood ties and Afghan clan loyalties, marks a sharp break with the centralized bureaucratic state of the Turks.

Before proceeding any further it might be well to point out an important chronological fact. Buhlul Lodi discontinued the minting of gold and silver coins as soon as he gained the throne in 1451. His grandson, Ibrahim (1517–1526) issued the order to the nobility which forced them to accept payments of the land tax in kind rather than in cash. Here we have a gap of at least sixty-five years between the initiation of the two economic policies both of which have been attributed to specie scarcity. On the face of it this discrepancy would seem to make a physical shortage of specie unlikely. Presumably, if the shortage of gold and silver precluded their use for coins in Buhlul's

[6] Moreland, pp. 68–9.

time, the peasantry would have begun to feel the pinch of a shortage of money with which to pay their taxes. If this, then, were the true reason for Ibrahim's new policy, why had peasant discontent required well over half a century to manifest itself after the first effects of the shortage were felt?

II

For the period 1451–1526, coins from other independent states of North India include numerous gold and silver issues along with the more plentiful billon and copper coins. The Muslim rulers of Bengal, Gujarat, Malwa, Jaunpur and Kashmir did not noticeably deviate from the monetary policies of the earlier Sultans of Delhi. This monetary tradition also influenced the Hindu rajadom of Tirhut in North Bihar. The only major exceptions seem to be the rulers of the Rajput confederation of Mewar and Marwar. If the Ranas of Marwar minted any coins none has survived, and only a very few copper specimens from Mewar exist. Yet the majority of North Indian states clearly had access to gold and silver. On this basis we can confine any shortage to the Lodi territories and possibly to Rajasthan. A closer look at the coins of the individual states suggests another consideration. Bengal and Gujarat[7] could be expected to coin generously in gold and silver since these two states controlled the main sources for precious metals—the eastern and western ports. However it is more difficult to explain the gold and silver coins issued by the states of Jaunpur, Malwa, and Tirhut. If one accepts Moreland's argument that the 'course of trade did not bring precious metals into Northern India in sufficient quantities', these interior states, adjacent to the Lodi Sultanate, should have been faced with the same shortage. In view of their geographical position, the source of supply for the gold and silver coins of the Sultans of Kashmir is even more puzzling.[8] Coins from these inde-

[7] For the large body of silver coins (550) and the far fewer gold coins (11) of the Sultans of Bengal dated between 1451 and 1526 see A. Karim, *Corpus of the Muslim Coins of Bengal, Down to AD 1538* (Dacca, 1960). Gujarati coins for this period are discussed by C.R. Singhal in the *Catalogue of the Coins of the Sultans of Gujerat in the Prince of Wales Museum* (Bombay, 1935) and a later article in the *Journal of the Numismatic Society of India*, (1953), v. 15, pp. 223–5.

[8] Kashmiri coinage is discussed in R. Whitehead, 'The Gold Coins of the Sultans of Kashmir', *Numismatic Chronicle*, v. 13, 1933, 5th series, pp. 257 ff.

pendent states, particularly Malwa and Jaunpur, have been catalogued in impressive numbers.

From Mandu, their capital, the Khalji Sultans of Malwa ruled a powerful state in the 15th century. To the northeast their territories bordered on the Sultanate of Delhi; in the northwest, the river Chambal marked the limit of the Rajput territories dominated increasingly by Mewar; and in the east the Sultanate of Gujarat blocked access to the sea. In the south Khandesh and Berar cut off the gold-producing areas in Bidar and Golconda. Even though the Sultans of Malwa had no direct control over the sources of gold and silver, their rich coinage does not reflect this. While the Lodis reverted to billon for their standard coin, the Khaljis continued to issue both gold and silver coins.

COINS FROM MALWA BY CONTENT[9]

Ruler	*Gold*	*Silver*	*Billon*
Mahmud I (1436–1468)	5	35	46
Ghiyasuddin (1469–1500)	29	53	1
Nadir Shah (1500–1510)	9	28	–
Mahmud Shah II (1510–1530)	7	33	2
Totals	50	149	49

Another neighbouring state, the Sultanate of Jaunpur, had been the rich 'Provinces of the East' of the Delhi Sultanate before the governor, Khwaja Jahan, gained his independence in 1394. His son Mubarak (1399–1402) formally adopted the title of Sultan and began

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and H.N. Wright, *Catalogue of the Coins in the Indian Museum, Calcutta* (Oxford, 1907), v. 2, pp. 187–95. Also S. Ahmad, *Supplement to Volume II* (Delhi, 1939), pp. 91–96.

[9] The information in this table was compiled from Ahmad, *Supplement*, pp. 133–47; C.R. Singhal, 'On Certain Un-Published Coins of the Sultans of Malwa', *Journal of the Asiatic Society of Bengal*, v. 3, 1937, pp. N119–38, (Numismatic Supplement); and H.N. Wright, 'The Coinage of the Sultans of Malwa', *Numismatic Chronicle*, (5th series), v. 11–12, 1931–32, pp. 291–312, and pp. 13–53.

a new coinage which was issued from the Jaunpur mint until the end of the dynasty in 1479. The last three Sultans of Jaunpur who were contemporary with the Lodis followed the practices of their predecessors on the throne and minted gold, billon, and copper coins along with a very few silver coins.

COINS FROM JAUNPUR BY CONTENT[10]

Ruler	*Gold*	*Silver*	*Billon*
Mahmud Shah (1440–1458)	6	1	25
Muhammad Shah (1457–1458)	–	–	4
Husain Shah (1458–1479)	8	–	62
Totals	14	1	91

In North Bihar the small Hindu kingdom of Tirhut or Mithila wavered between autonomy and degrees of tributary status throughout the Delhi Sultanate period. Until Nusrat Shah of Bengal annexed the rajadom in 1526 it acted as a buffer state between the rulers of Jaunpur and Bengal. Recently two finds of coins struck by the ruling Oinvara dynasty have been discovered. Scholars have identified gold coins of Raja Sivasimha (*c.* 1390–1410) and a silver coin of Raja Bhairavasimha (*c.* 1474–1490).[11] Although we know very little about the coinage from Tirhut it is possible to conclude that the rulers of the state did coin gold and silver in large quantities, and that after 1494 much of this was used for tributary payments to the Lodi Sultan at Delhi. Sikandar Lodi's expedition through Bihar in 1494 forced the Raja of

[10] This table was compiled from Ahmad, pp. 115–20; S.A. Shere, 'Some Unique Gold Coins found in Bihar', *Journal of the Numismatic Society of India*, 1945, p. 41; A. Suhle, 'A List of Indian Coins in the Collection of the State Museum of Berlin', *Journal of the Numismatic Society of India: Golden Jubilee Volume*, 1961, p. 451; and H.M. Whittell, 'The Coinage of the Sharqi Kings of Jaunpur, *Journal of the Asiatic Society of Bengal*, 1922, v. 18, (Numismatic Supplement), pp. N10–55.

[11] R.D. Banerji, *Archaeological Survey of India: Annual Report*, 1913–14, p. 248; D.C. Sircar, 'Alleged Silver Coin of Ramabhadara of Mithila', *Journal of the Numismatic Society of India*, 1958, pp. 192–4.

Tirhut to resume tributary payments to Delhi and Babur's *Memoirs* confirm the continuity of this arrangement. His summary of the ' . . . revenues of the countries now held by me (AH 935–AD 1528)' was derived from Lodi records. Babur lists the payments made by tributary states immediately after the tax revenues from the directly-administered provinces. The first tributary state is 'Tirhut from Raja Rup-Narain's tribute, silver—2 *lakhs*, 55,000 *tankas* and black (i.e. copper) 27 *lakhs*, 50,000 *tankas*'.[12] The fact that the entry for Tirhut is specifically described as 'silver' whereas none of the other entries are specified as to value would seem to indicate that the Raja probably paid his tribute with silver coins similar to those of Raja Bhairavasimha (*c.* 1474–1490) rather than with the far less valuable billon coinage of the Lodis. There is further evidence for this assumption in the fact that the figure of 2 *lakhs* payment in silver from Tirhut is by far the smallest amount listed by Babur. Almost all the figures from the provinces reach at least the magnitude of a *crore* and the only other figure for tribute (Rantanbhur) is 20 *lakhs* in denominations not identified.

This scanty information about the coins of Tirhut is important on two counts: first, that it was possible for a small and unimportant North Indian state to obtain and to mint precious metals in the 15th century without adulteration, and second it is almost certain that much of this coinage found its way as tribute into the Lodi treasury. Earlier writers who were concerned with this period have overlooked the steady expansion of the Lodi state, especially in regard to the problem of the supply of precious metals. The Lodi Sultans controlled more and more of the resources of North India as they exacted tribute from the Hindu rulers and conquered and deposed the major Muslim Sultans.

However no gold or silver coins survive from the 15th century Rajput Confederacy. This group of kingdoms, headed by Rana Sanga of Mewar (1509–1526), emerged as a formidable North Indian power after a long series of conflicts with Malwa and Gujarat. The combined strength of Mewar and Marwar and the lesser Rajput principalities seriously threatened the Lodi Sultans. And, of course, Babur defeated Rana Sanga at the battle of Khanua in 1527 before he could control all of North India. Nevertheless the coins of the Rajputs do not reflect their political power. There are no coins from Marwar and we have only a few copper coins minted by the Ranas of Mewar. Webb and Wright have catalogued two coins from Rana Kumbhakarna (1433–

[12] Babur, *Babur-Nama*, A.S. Beveridge trans. (London, 1922), p. 521.

1468) and sixteen copper coins of Rana Sanga.[13] Nothing has been published to date concerning issues of the two intervening rulers of Mewar (between 1468 and 1509).

The Rajput coins (or lack of them) would seem to show that the Rajput Ranas suffered from the same scarcity of specie that had supposedly prevented the Lodis from coining gold and silver coins. However other evidence suggests that this was not the case.

At the beginning of the 15th century silver mines were discovered in Mewar about sixteen miles south of Udaipur, the capital. These mines were still being worked in the early 1800's.[14] It has been suggested that the discovery of these mines and the economic power which resulted was a cause for the political expansion of Mewar in the 15th century.[15] We also know from epigraphic and literary sources that silver coins circulated freely in 15th century Mewar.[16] These coins probably came from the mints of Malwa and Gujarat, but they could have been utilized as a source of supply for melting and minting of silver coins by the Ranas of Mewar.

III

If the problem of a scarcity of treasure was not common to all of North India, and the nearby states of the interior had normal supplies of gold and silver, then the point of emphasis must shift to Delhi. Why should Delhi, the centre of an expanding empire after 1451, be subject to a shortage of treasure? First Thomas and later Moreland have suggested possible explanations for this—neither of which is very credible. Thomas has postulated (see quotation above) that when Timur sacked Delhi in 1398 he emptied the imperial strongrooms and left the provincial treasuries intact. This is certainly true, but how long did the effects of the invasion last? Could two days' looting have depressed the economy of the city over fifty years later (at the start of the Lodi

[13] W. Webb, *Currencies of Rajputana* (Westminister, 1893), pp. 6–7; and Wright, *Catalogue* no. 119–125, pp. 259–60.

[14] J. Tod, *Annals and Antiquities of Rajasthan*, W. Crooke, ed. (London, 1920), v. I, p. 321.

[15] R.C. Majumdar, ed., *History and Culture of the Indian People*, 'The Delhi Sultanate' (Bombay, 1960), p. 331.

[16] R.C. Agrawala, 'Literary Evidence for the Coinage of Mewar, (10–17th Century)', *Journal of the Numismatic Society of India*, 1958, pp. 16–17.

dynasty in 1451) or as late as the beginning of Ibrahim's reign, one hundred and nineteen years after the event?[17]

A detailed examination of the post-1398 coins issued from the Delhi mint reveals that Timur did indeed empty the royal treasury, but that recovery began very quickly after the invaders departed. Copper coins were issued the year after the invasion in 1399 and appeared regularly thereafter. After a fourteen year interval the first silver coins were struck, in 1411–12. And when a new dynasty, the Sayyids, came into power, the first ruler, Mubarak Shah II, ordered the first gold coins to be minted in 1421–22.[18] In other words, less than twenty-five years after the invasion, the Sultans of Delhi possessed a new stock of precious metals. Economic recovery depended on the slow process of political reconstruction, but slowly revenue from the surrounding area found its way into the capital. The Sayyids issued gold and silver coins throughout the thirty-year life of the dynasty.

Moreland has argued that the loss of tribute from Bengal and Gujarat cut off Delhi from access to the imports of treasure from the coastal ports and that normal trade routes could not bring enough supplies to the interior due to the political fragmentation and instability of the period.

SAYYID COINS BY CONTENT[19]

Ruler	*Gold*	*Silver*	*Billon*
Mubarak Shah II (1421–1434)	2	5	—
Muhammad V.b. Farid (1434–1445)	5	5	17
Alam Shah (1445–1451)	—	1	8
Totals	7	11	23

[17] Elliot has included Timur's description of the occupation of Delhi from his *Autobiography* in his *The History of India*, v. 3, pp. 445–6. A number of private fortunes must have remained intact because 'the quarter of the saiyids, the '*ulama*, and the other Musulmans' was spared.

[18] Wright lists the first copper coins in *The Sultans of Delhi*, no. 860–61, p. 212; the first silver coin is also in Wright, no. 851, p. 210; the first gold coin is no. 804, p. 201 and the first billon coin is no. 898, p. 234. The first gold coin is a post-humous issue of Muhammad IV b. Firuz (1390–1392/3) struck by Mubarak Shah II.

[19] Coins of the Sayyids are catalogued in Wright, pp. 231–42.

However he greatly exaggerates the political instability (the word 'anarchy' is implicit in his analysis) and underestimates the effectiveness of the very old trading routes and institutions of interior North India. A recent writer on the late Sultanate period has gone to some lengths to refute Moreland:

> Inland trade was in a flourishing condition throughout the 15th century [in North India]. A treasure trove discovered in 1908 between Garha and Madan Mahal, and consisting of coins of Muhammedan kings of Delhi, Kashmir, Gujarat, Malwa, the Bahmani kingdom and Jaunpur, ranging from AD 1311 to AD 1553 is a good testimony of the constant inland trade and commerce throughout the length and breadth of the country since the treasure trove containing an assortment of coins from almost all important States of India was discovered at a place situated in the heart of the country.[20]

Undoubtedly normal trade relations continued between the various political units in India in the 15th century. But the Lodi Sultans did not depend on peaceful trade to secure treasure. Each of the three members of the dynasty led his army in constant aggressive and successful warfare against his neighbours. Steadily increasing tribute and booty from conquest should have brought large amounts of treasure into Delhi. We have some direct evidence that it did so.

Buhlul Lodi inherited the fief or assignment of Sirhind in the Panjab.[21] From this base he attacked and drove out the assignees of Dipalpur, Lahore, and Panipat. By this time he controlled most of the Panjab. Muhammad Shah, the ineffectual Sayyid ruler, could only confirm his possession of these assignments since by this time Buhlul's forces were more powerful than those of his sovereign. When Alam Shah (1445–1451), Muhammad Shah's successor, went into voluntary retirement, Buhlul Lodi entered Delhi and proclaimed himself Sultan. At this time he issued the first billon *buhlulis* from the Delhi mint. Only four years previously in 1447 Alam Shah Sayyid had struck a silver *tanka*.[22]

[20] K.S. Lal, *The Twilight of the Sultanate* (London, 1962), pp. 280, 282. It is also important to remember that trade in India has never been exclusively confined to the sea. In the province of Oudh, in 17th century Mughal India, 'A brisk trade was carried on with the people of the Himalayan region, who brought, on the backs of men goats and hill ponies, gold, silver, copper, musk, the tail of the yak cow (*qutas*), and other things, . . . '. From Jadunath Sarkar, *The India of Aurangzeb* (Calcutta, 1901), p. xlix.

[21] This account of the Lodis is from Majumdar, *The Delhi Sultanate*, pp. 139–54, and A.B. Pandey, *The First Afghan Empire in India* (Calcutta, 1956).

[22] Wright lists the first billon coin as no. 924, p. 243 and the last silver issue

The next year, in 1452, Mahmud Shah Sharqi, the Sultan of Jaunpur, attacked Delhi. He claimed the Sultanate of Delhi as the son-in-law of the last Sayyid Sultan. This action started a twenty-eight year war between Jaunpur and Delhi. Finally in 1479, in the most important victory of his career, Buhlul conquered Jaunpur, deposed the ruler, and placed his son Barbak on the throne as a semi-independent ruler. Buhlul also withdrew all gold and silver coins from the Jaunpuri currency—a change apparently not caused by a shortage of precious metals. Husain Shah Sharqi had previously minted at least one series of gold coins at Jaunpur between 1465 and 1475. The first coins to appear from the Jaunpur mint after the conquest are a series of copper coins beginning in 1483 bearing Buhlul's titles. Three years later, complying with his father's policy, Barbuk initiated a new series of billon coins struck with his name and title.[23] These facts seem to indicate that Buhlul Lodi's coinage policy was not motivated simply by a physical shortage of treasure with which to strike coins.

By his conquest of Jaunpur Buhlul removed a threatening rival state and restored the old eastern provinces of the Delhi Sultanate. As soon as his preoccupation with the long war had ended, he was able to re-establish his authority over the petty rajas and chiefs of the area around Delhi and in the Ganges/Jumna Doab. These had refused to pay either revenue or tribute. After 1479 they were forced to pay heavily for the privilege of 'pacification' and reabsorption into the larger structure. Nimatulla, a Muslim historian, has described a typical expedition shortly after Buhlul established his son at Jaunpur:

> He [Buhlul] then proceeded to Dhulpur [from Kalpi] by the road of Chandawar; and the Rai of Dhulpur came forth to meet him, and presented him with some *mans* of gold, so that the Rai was treated as a well-wisher of the State. The Sultan marched thence and came to the *pargana* of Bari. Ikbal Khan, the governor of Bari, having paid his respects in a fitting and respectful manner, was appointed a servant of the State. He made an offering of some *mans* of gold to the Sultan, who confirmed him in the possession of Bari.[24]

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of the Sayyids is no. 916B, p. 237.

[23] Whittell lists the gold coins of Husain on p. N30 and the Lodi issues from Jaunpur on p. N31.

[24] Elliot, *History of India*, v. 5, p. 90. The translation is from the *Tarikh-i Khan Jahan Lodi* (comp. 1612). *A man (or maund)* today weighs 82.8 pounds. In the medieval period it was between 28 and 30 pounds. See Thomas, *Chronicles*, pp. 162–3, n.

By these methods, Buhlul consolidated and ' . . . left to his successor an empire practically twice as large as that with which he started in 1451'.[25]

Sikandar Lodi (1489–1517) vigorously carried on his father's policies. He defeated Husain Sharqi, the former Sultan of Jaunpur, near Banaras in 1494 and pursued him into Bihar. Husain escaped into Bengal, but Sikandar utilized the opportunity to dethrone the Raja of Bihar. He appointed a governor for Bihar and seized large tracts from the Rajas of Saran and Tirhut that were assigned to Afghan nobles. After his successes in the east, Sikandar then led a number of attacks on the Rajput fortresses to the south. He failed to take the massive fort at Gwalior on two separate occasions, but despite these setbacks, his armies overran the Rajput fort of Dholpur in 1502, Mandrail in 1505, and Utgir, Awantgarh, and Narwar in 1507. Two years later the Raja of Nagaur acknowledged Sikandar's suzerainty in return for help in retaining his throne. In 1513, Sikandar established a rebel prince from Malwa as his puppet in Chanderi, a former possession of Malwa. There can be no doubt that each success in the field brought new amounts of treasure to Delhi—as ransom, loot, or tribute. The spirit created by this enterprise, and its financial effect is well illustrated by the author of the *Tarikh-i Salatin-i Afaghana*. He quotes a speech of Mian Maruf in which the veteran commander declares his loyalty to the Lodis: 'I have eaten the salt of Sultan Bahlol and his offspring for thirty years; and I was chief commander of the army during the reign of Sultan Sikandar . . . I slew the Raja of Nagarkot . . . *I brought seven mans of gold from the Raja of Bihar* . . . [italics mine] Even now [under Ibrahim] I am ready to undertake any duty . . . '.[26] During his lifetime Sikandar constantly tried to increase his control over the nobility and to bring the administrative system toward the centralized model of the earlier Turkish Sultans of Delhi. When he died in 1517 he had carried the Sultanate to an impressive level of strength and stability.

But Ibrahim Lodi's attempts to continue his policies exposed the decentralizing forces in the Afghan political system. The nobles in the east, enraged by Ibrahim's 'arrogance', rebelled and organized under a member of the Lohani clan, Dariya Khan, the governor of Bihar, who proclaimed himself Sultan Muhammad Lohani. In the west Daulat

[25] Pandey, *The First Afghan Empire in India* (Calcutta, 1956), p. 95.
[26] Elliot, *History of India*, v. 5, p. 90.

Khan Lodi, the governor of the Panjab, negotiated with Babur for help in overthrowing his kinsman. Unquestionably this rapid decrease in political control during Ibrahim's reign meant a similar decrease in revenues. Despite this, Babur's account of the distribution of Ibrahim's captured treasure reveals that the Lodis were not yet bankrupt. After Humayan and the nobles received their rewards, ' . . . suitable money gifts were bestowed from the treasury on the whole army . . . To those not with the army went a mass of treasure in gifts and largess . . . and indeed to the whole train of relations and younger children went masses of red and white (gold and silver), of plenishing, jewels and slaves'.[27]

This record of steady expansion points inescapably to the conclusion that there was no shortage of precious metals in Delhi or in the territories controlled by the Lodis from 1451 to 1526. However certain other problems remain. The other unusual economic conditions mentioned before—extremely low prices, the mixed-metal currency of the Lodis, the chronicler's remark about the difficulties of obtaining gold and silver, and the order to pay the land revenue with produce rather than cash—have all been ascribed to the unavailability of precious metals for money, for coining. Each of these facts requires an attempt at an alternative explanation. A contemporary Indian historian comments in regard to the low prices that ' . . . the cheapness of this reign was occasioned by abundant harvests'.[28] But the other problems are more complex.

IV

Shortly after the founder of the Lodi Kingdom seized power in Delhi he severely debased the coinage. This innovation accompanied an important change in the political structure of the Delhi Sultanate that took place at the same time. The new ruler did not attempt to recreate the centralized bureaucracy of the earlier dynasties of the Sultanate. Instead, he created a new administrative and military class whose first allegiance was to the clan and tribe, not the Sultan.

The *umara* or nobility of the 13th and 14th centuries, the ruling military and official class, were a heterogeneous group. They were at

[27] Babur, *Babur-Nama*, p. 522.
[28] See long passage quoted on p. 126.

first largely Turkish with a later admixture of Afghans, Persians, Mongols, and Indian converts to Islam. Since many began their careers as royal slaves they had no unifying kinship ties. They held their titles and offices at the will of the ruler. For the greater part of this period they were tightly controlled by him.[29] On the other hand, the Afghan tribal chiefs, who, under the Lodis, became the new ruling class, were a far more independent and unruly elite.

Buhlul Lodi rose to power in the Punjab by means of his successful leadership of the Afghans in that province and especially through the support of the members of the own clan, the Lodis. But throughout his career he actively recruited tribesmen from Afghanistan for his enterprises. After his accession to the throne of Delhi he sent a *farman* to his 'many kinsmen renowned for their valour and strength, who are pressed for a livelihood' suggesting that they migrate and join his forces:

> God in his goodness has granted the kingdom of Delhi to the Afghans, but the other kings of Hind wish to expel them from the country. The honour of our women is concerned; the lands of Hind are broad and rich, and can afford maintenance to many. Come, then, to this country; the name indeed of sovereignty shall remain with me, but whatever countries we may conquer shall be shared between us as brothers . . . .[30]

Buhlul welcomed and rewarded all the Afghans who responded to this plea. In return for military service he gave the tribal chiefs assignments

[29] Moreland lists five characteristics of the position of Muqti (later Amir) or provincial governor which made the Delhi Sultanate of the 13th and 14th centuries 'a bureaucracy of the normal Asiatic type'. (i) 'A Muqti had no territorial position of his own, and no claim to any particular region: he was appointed by the King, who could remove him or transfer him to another charge at any time . . . ' (ii) ' . . . The essential function of a Muqti was thus governorship, and he was liable to fine or dismissal if he failed in his duties.' (iii) He had to maintain a body of troops at all times, but ' . . . the strength and pay of the Muqti's troops were fixed by the King, who provided the cost; . . . ' (iv) 'The Muqti had to collect the revenue due from his charge, and after defraying sanctioned expenditure, such as the pay of the troops to remit the surplus to the king's treasury at the capital.' (v) 'The Muqti's financial transactions in regard to both receipts and expenditure were audited by the officials of the Revenue Ministry, and any balance found to be due from him was recovered by processes, which under some kings, were remarkably severe.' (i.e. torture). Needless to say, this is the antithesis of the Afghan system in the 15th and early 16th centuries. *Agrarian System of Moslem India*, pp. 218–21.

[30] Elliot, v. 4, pp. 301–2.

on the land revenue for themselves and their retainers. The Sultan retained only the areas directly around Delhi as 'Reserved' or Crown lands. Salaried officials administered these directly. For the remainder of the kingdom the assignees performed the basic administrative tasks —maintenance of law and order and collection of the land revenue. But the center no longer directly paid and controlled the army. Instead each assignee organized and maintained a stipulated body of troops from the revenues of his holding. The Lodi Sultans gave larger grants to individuals than had earlier been the custom. These large grant-holders (or assignees) sublet villages in turn to men in their command. Under the Lodis even 'governors' of provinces were in reality holders of large assignments at strategic points in the province. They had far more power than salaried officials.

The Sultan could decide disputes between nobles, requisition military forces and apportion and resume assignments. But by and large residual powers remained with the assignees who had a free hand in the administration of their lands. No longer did the Sultan (or his agent, the provincial governor) have a monopoly on the legitimate use of force. Assignees could and did attack recalcitrant villages and chiefdoms, kill or enslave the inhabitants and resettle the areas—all without recourse to the provincial governors.

The Sultan's dependence on tribal sentiment and blood relationships for political support further limited his power and resources. Buhlul's most important adherents were members of the Lodi, Lohani, Farmuli and Sharwani clans, all belonging to the Ghilzai tribe.[31] All could claim a blood relationship with the Sultan. No longer could he, in the style of a Persian Sassanian monarchs, overawe his slave-officials and command obedience simply by the grandeur of his presence.[32] Instead pressures from the tribal nobility forced Buhlul to avoid

[31] Nizamuddin, in the *Tabaqat-i Akbari* (comp. *c.* 1594), lists 'fifty-three notable amirs' of the Afghan kingdom at the time of Buhlul's death in 1489. Included are Buhul's six sons and fifteen other Lodis; eight Farmulis; seven Lohanis; and four Sharwanis. Of the remainder six are *hijab khas* or personal attendants of the Sultan whose clan names are not given. A total of forty among forty-seven leading nobles belong to these four clans. These include governors of provinces, commanders of strategic fortresses, city commanders and important military leaders. In the subsequent narrative sons and other relatives of these nobles are mentioned as the holders of *parganas* and other secondary posts. *Bibliotheca Indica* (Calcutta, 1927), v. 225:1, p. 356.

[32] See K.M. Ashraf, *Life and Conditions of the People of Hindustan* (Delhi, 1959), pp. 3, 4.

the grandiosity of earlier Sultans and to defer to tribal customs. 'Even during [his] public audiences he did not occupy the throne; but seated himself on a carpet.'[33]

The Afghan system seriously curtailed the economic power of the Sultan. The tribal nobility retained nearly all of the two major sources of state income—land revenue and war booty. As Moreland emphasizes ' . . . taking Grants and Assignments together, there can be no doubt that the greater part of the revenue of the Afghan kingdom was alienated, and that the real masters of the peasant were the assignees'.[34] Not only did the assignees hold most of the lands of the kingdom, but any increases in the land revenue, due to good harvests, remained with them. Formerly under stronger central governments the state forced the assignees to send any surplus income over the nominal valuation of the assignment to the revenue ministry at the center. But the Afghan chiefs retained all revenues collected by them.

Similarly the Sultan distributed any goods or treasure from conquest and tribute to the victorious commanders and their followers—undoubtedly according to tribal usage. A medieval Muslim historian wrote that 'Whatever came into his [Buhlul's] possession, in money, goods or new *parganas*, he distributed it all among his troops and reserved nothing whatever for himself. He accumulated no treasure, and executed his kingly functions without parade and ostentation'.[35] While engaged in eulogizing the Sultan, the chronicler has unintentionally given us a succinct appraisal of his economic difficulties.

At this point it is possible to suggest that the decline in the economic power of the Sultanate may have caused the debasement of the coinage after 1451. There were ample supplies of gold and silver with which to coin in the kingdom. But did the central government possess enough specie in its treasury to enable the Sultan freely to coin gold and silver? If gold and silver coins were minted and distributed in the usual largess at coronations, royal births and marriages, court ceremonies, and as tokens of affection for supporters of the regime and victorious military leaders—all required by custom—it is likely that this would have been a continual drain on the royal treasury. This is especially critical in view of the decentralized revenue system of the Sultanate. Most of the revenues of the kingdom did not return to the centre for redistribution. A billon coinage, using comparatively

[33] Elliot, v. 4, pp. 436–7. From the *Tarikh-i Daudi* by Abdulla.
[34] Moreland, p. 68.
[35] Elliot, v. 4, p. 436.

little silver, would serve for the proclamation of the royal title and for ordinary circulation. There is, of course, little positive proof for this assumption,[36] but the writer feels that there must be a causal link between the sudden debasement of the coinage and the greatly reduced political and economic strength of the central government as embodied in the person of the Sultan.

However, an alternative explanation is more readily available for the new revenue policy initiated by Ibrahim Lodi. All the histories of the Lodis place great stress on the efforts of Sikandar and Ibrahim to curb the powers of the Afghan chiefs. Ibrahim made every effort to reconstruct the omnipotent Sultanate of the Turks. The circumstances of his accession to the throne intensified the conflict between nobles and crown. At Sikandar's death in 1517, the Afghan chiefs forced a partition of the empire. One of his sons, Jalaluddin, was to be crowned in the east at Jaunpur, and Ibrahim, a younger brother, was to rule the western half from Delhi. By creating two rival sultans, the nobles hoped to greatly strengthen their power. They could then freely shift their allegiance and military support from one to the other. But Ibrahim gathered enough support to crush his brother and to reunite the kingdom by the end of the year. He executed Jalaluddin and a number of older nobles suspected of complicity. In succeeding years Ibrahim continued to arrest and torture various influential members of the Afghan nobility as his fear of revolution increased. Finally a series of revolts broke out that ended the dynasty.[37]

Ibrahim's order to the chiefs and nobles to collect the land revenue in kind was another weapon in this conflict—a weapon aimed at reducing the incomes of the assignees and their power. It was also a

[36] It is, however, interesting to notice that the rulers of the Rajput states may have faced analogous financial problems. They, too, avoided coining with precious metals. Only a few copper coins have been found from the medieval Rajput states (see above). The political institutions of the Rajputs were closely similar to those of the Afghans (and may have had common antecedents since the Rajputs originally migrated from South-west Asia). In Mewar the Rana belonged to a ruling clan, members of which were the hereditary heads of the smaller chiefdoms within the structure. Instead of ruling over administrative officials who were paid subordinates, the Rajput Kings were forced to deal with fellow clansmen who did not owe them absolute authority. They regarded their ruler as only a paramount chief with, to be sure, great authority, but nevertheless an equal among equals or a tribal chief. See A.E. Lyall, *Asiatic Studies*, (1st series), pp. 238–47 and p. 185 n.

[37] See Pandey, *The First Afghan Empire in India*, pp. 161–214 for a full description of these events.

move to assert the power of the Sultanate over the internal affairs of the assignees and dependent chiefs.

In the Afghan system each assignee had at least one *pargana* (i.e. an aggregate of villages probably ten or more) at his disposal. Every year the assignee assessed the land revenue on the headmen of the villages controlled by him. In other words, in the method of collection known as 'group-assessment' the assignee negotiated for a lump-sum cash payment from the village. Although the villagers actually divided the grain heap in a sharing process within the village, the headman assumed responsibility for disposing of the State's share of the crop for cash. And he, in turn paid the representative of the Afghan assignee or Hindu chief who came to collect the cash payment.[38] The final amount assessed and ultimately collected was based on two variables (1) the records of the *qanungo*, or official record keeper for the *pargana*, which depended on the records of the village accountant, and (2) the success of the harvest. The *qanungo's* records showed for each village the amounts collected in the past, previous attempts at evasion, and recent increases or decreases in the amount of acreage sown. Any hereditary Hindu chiefs or rajas underwent the same annual process of negotiation with the Afghan assignee over them.

With this process in mind we can more readily understand the effect of Ibrahim's decree. He neatly shifted the burden of disposal of the grain for cash from the village headmen and Hindu chiefs to the Afghan assignees—at a time of greatly increased yields. As the chronicler[39] noticed, the assignees were completely nonplussed by the flood of grain descended on them. Instead of the cash equivalent they were now buried with the State's share of one-half to one-third the harvest, and had no adequate storage facilities. Forced to quickly sell the grain in order to obtain cash for their 'personal expenses',[40] the nobles were clearly at a disadvantage. To obtain funds they had to 'sell their grain at any price that was procurable' further driving prices down for the benefit of the grain brokers and the city markets. Finally ten *maunds* (about 300 lbs.) of grain would bring only a billon *tanka* (a *buhluli*) and in this context for the assignees, 'Gold and silver were only procurable with the greatest difficulty'.

[38] Moreland, p. 73.

[39] See long passage quoted on first page.

[40] Expenses which included the payment of troops and retainers, who tended to mutiny when their pay was in arrears.

Chapter Five

The Silver Currency Output of the Mughal Empire and Prices in India During the Sixteenth and Seventeenth Centuries

AZIZA HASAN

The 16th and 17th centuries witnessed two remarkable phenomena in European economic history, namely, the price revolution and the great influx of silver and gold into Europe from the Americas. Most historians have held the one to be largely the result of the other. Though there may be considerable dispute as to the exact nature of their interconnection, and the relative scale of the bullion influx (relative, that is, to the stock of precious metal already existing in Europe), there may not be much disagreement with the view that these phenomena were not confined, in their consequences, to Europe alone.

Surprising as it may seem, the exact contrary was implicitly assumed in much of the writing on the economic history of India;[1] although as early as 1786 James Grant had referred to the effects on 17th century Indian prices of 'the extraordinary influx of specie from the American mines'.[2] Only in some recent writing has there been appreciation of the possibility that both the bullion influx and the rise in prices could in due course have extended to India from Europe.[3]

Unfortunately, the evidence on both these points, though suggestive enough, is not statistically very satisfactory.

[1] W.H. Moreland, *From Akbar to Aurangzeb* (London, 1923), and Brij Narain, *Indian Economic Life, Past and Present* (Lahore, 1929).

[2] See his 'Analysis of the Finances of Bengal', written in 1786, and included in the *Fifth Report*, . . . , ed. Firminger (Calcutta, 1917), II, p. 483.

[3] Irfan Habib, *Agrarian System of Mughal India* (Bombay, 1963), pp. 392–4; K.N. Chaudhuri, *The English East India Company, 1600–1640* (London, 1965).

For example, while throughout the 17th century allegations continued to be made about the enormous drain of bullion from Europe to the East, especially to India, the quantitative information so far available is defective and incomplete.[4] There is the further question whether these new supplies added sufficiently to the existing silver stock in India (particularly in the Mughal Empire, where silver was the basic currency-metal) so as to cause a substantial expansion in money supply. Owing to the disappearance of Indian mint records we have no direct information of the total output of Mughal silver currency at any time. It should, therefore, be of some interest to consider a device whereby we may yet be able to construct a curve of the annual silver-currency output of the Mughal Empire.

Before explaining the device that we are suggesting, it is worth giving some known facts about the Mughal currency system. Mughal currency was based on silver, the basic unit being the rupee coin which retained practically the same weight and standard (which was of very high metallic purity) throughout our period (i.e. until 1707). The Mughal system, moreover, was of 'free' coinage; that is, it was open to anyone to take bullion to the mint and get it coined into rupees, at charge.[5] There was, therefore, no debasement at any time, and the value of the rupee was more or less closely linked to the market value of silver. Usually, the rupee carried a price in bullion somewhat in excess of its own weight. Given such a minting system, we may indeed

[4] Cf. for example the statement of Davenant that 'the Silver and Gold brought from America and Silver produced from the European mines during the last 200 years, amounted to 800 million pounds. I can not find what is become of the 800 million dug out of the earth unless 150 millions of it was carried away and sunk in the East Indies'. S.A. Khan, *The East India Trade during 17th Century*, p. 269. No better estimates of the total European exports of bullion to the East exist, to my knowledge. The statistics of the bullion exports through the auspices of the English East India Company are important, but cannot in themselves suffice even as an index of fluctuations in total exports, since the Company's own share in such exports grew from an insignificant proportion at the beginning of the 17th century, to a very large one towards its close. However, for what they are worth, these statistics have been used later on in this paper. Similar figures for the Dutch Company's bullion exports are not available to me, though K. Glamann, *Dutch Asiatic Trade, 1620–1740*, pp. 56–7, 61, refers to records containing these details, and on their basis offers a general estimate of annual export of 1 to 2 million florins during the latter half of the 17th century.

[5] See S.H. Hodivala, *Historical Studies in Mughal Numismatics* (Calcutta, 1923), pp. 235–44; Irfan Habib, 'The Currency System of the Mughal Empire, 1556–1707', *Medieval India Quarterly*, Aligarh, vol. IV, nos 1–2, pp. 3–4.

assume that any increase in the stock of silver in the country was likely to have caused an expansion of the output of rupee coins. Since at least during this period, there was no domestic production of silver,[6] any increase in India's silver stock could have come only from imports. It may thus be supposed that, allowing for remintage, the fluctuations in Mughal currency output should have reflected faithfully the ebb and flow of the silver influx into India.

We may now describe the method by which we intend to build up our currency-output curve.

Mughal coins always bear the name of the mint from which they were issued, and, for the reason that this affected their values slightly,[7] also give the year in which they were minted. The latter fact enables us to assign the number of the Mughal coins preserved to definite years. Now, if we tabulate and add up the total number of coins of each year preserved in the various existing collections, we may get an indication of the relative quantity of silver currency issued each year by the Mughal mints. If the annual variations in the number of the coins preserved faithfully represent the variations in the total annual currency output, then, while reconstructing a curve of the total number of coins preserved, we may really be reconstructing (upon a scale which remains unknown to us) the curve of the currency output of the Mughal empire.

I have, therefore, tabulated, year by year, the number of rupees and their silver fractions, catalogued and preserved in the Indian Museum, Calcutta; the British Museum; the State Museum, Lucknow; and the Lahore Museum and Rodgers' collection (Table 1).[8] The total

[6] Moreland, *India at the Death of Akbar* (London, 1920), p. 137. Cf. Watt, *The Dictionary of the Economic Products of India* (London, Calcutta, 1893), vol. VI, pt iii, pp. 238–43.

[7] I. Habib, 'Currency System of the Mughal Empire', *Medieval India Quarterly*, vol. IV, nos 1–2, pp. 4–6.

The premium enjoyed by the *sikka* rupee over *chalani* was of about 2 per cent, and that of the *chalani* over the khazana rupee of 1–3 per cent.

[8] (*a*) *Catalogue of Coins in the Indian Museum*, Calcutta, by N. Write and *Supplement to the Catalogue of Coins in the Indian Museum*, Calcutta, vol. III, by Shamsuddin Ahmad.

(*b*) *The Coins of the Mughal Emperors of Hindustan in the British Museum* by Lane-Poole, ed. by R. Stuart Poole.

(*c*) *Coins of the Mughal Emperors of India* collected by C.J. Rodgers, and published by the Punjab Government.

(*d*) *Catalogue of Coins in the Government Museum*, Lahore, by C.J. Rodgers.

number of coins bearing years of mintage is so large relatively to coins which lack any indication of their year of issue that we can practically disregard the latter category. Only 4.9 per cent of the coin of Akbar (1556–1605), 3.4 per cent of those of Jahangir (1605–27), 3.9 per cent of Shahjahan (1628–58) and 0.7 per cent of Aurangzeb (1659–1707) have lost the years that were stamped on them.

The number of coins to be taken into consideration is also very large in absolute terms. In making up the totals in the Table I have adopted the method of taking all the standard rupees as units, the *sawai* and *rupya-i-Jahangiri* as equal to 1.25 and 1.20 respectively and the smaller silver coins at par with their fractional values. The totals for the four reigns are, then, as follows: 1739 Rs of Akbar (1556–1605), 1346 Rs of Jahangir (1605–1627); 1556 Rs of Shahjahan (1628–58) and 2426 Rs of Aurangzeb (1659–1707); in all, 7,067 rupee-coins.

In assigning the coins to various years the following system has been adopted:

1. *Hijri* years from the year of Akbar's accession, AH 963 to AH 1000, since almost all coins, except the few of the later years of the period, carry the *Hijri* year.

2. (*a*) Beginning with the 38th regnal year of Akbar to his death, 50th regnal year in the *Ilahi* calendar. The Salim Shahi coins and those coins of Jahangir which bear the *Hijri* year 1014 have been assigned to the 50th R.Y. of Akbar.[9]

(*b*) From the first regnal year of Jahangir to the 22nd regnal year

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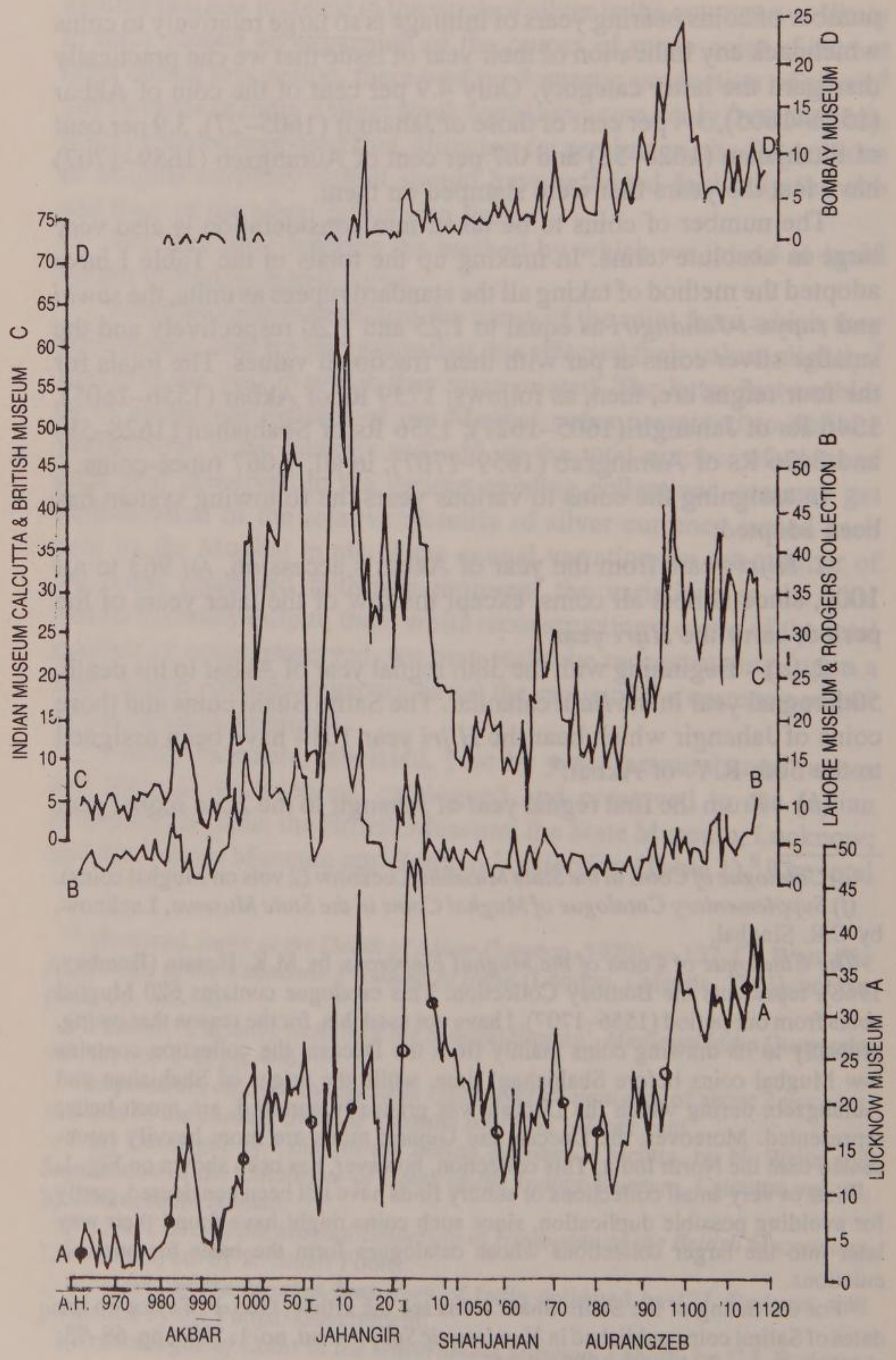
(*e*) *Catalogue of Coins in the State Museum*, Lucknow (2 vols on Mughal coins).

(*f*) *Supplementary Catalogue of Mughal Coins in the State Museum*, Lucknow, by C.R. Singhal.

The Catalogue of Coins of the Mughal Emperors, by M.K. Husain (Bombay, 1968), represents the Bombay Collection. This catalogue contains 620 Mughal coins from our period (1556–1707). I have not used this, for the reason that owing, probably to its drawing coins mainly from the Deccan, the collection contains few Mughal coins before Shahjahan' time, while the reigns of Shahjahan and Aurangzeb, during which the Deccan was gradually annexed, are much better represented. Moreover, the Deccan and Gujarat mints are more heavily represented than the North India. This collection, however, has been shown on Fig. 1.

Lists of very small collections or sundry finds have not been considered, partly for avoiding possible duplication, since such coins might have found their way later into the larger collections whose catalogues form the basis for our calculations.

[9] For the dating of the Salim Shahi coins see the article, Geo. P. Taylor on the dates of Salimi coins published in *Numismatic Supplement*, no. 1, 1904, pp. 68–73; also vol. v, no. 8, August 1909, p. 346.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AKBAR
JAHANGIR
SHAHJAHAN
AURANGZEB

of Jahangir in the *Ilahi* calendar. Shahjahan's coins of AH 1037 but without any R.Y., have been assigned to Jahangir's 22nd regnal year.

(*c*) From the Ist R.Y. of Shahjahan to the 10th R.Y. in the *Ilahi* calendar.

During the period of the 38th R.Y. of Akbar to the 10th R.Y. of Shahjahan while most of the coins bear the *Ilahi* years, some bear *Hijri* years only and have been converted into the *Ilahi* years; but there is always a chance of error by one year. However, since as a rule successive *Hijri* years have been equated with successive *Ilahi* years, the net possible margin of error would be very small.

3. From AH 1048 to 1118 the *Hijri* calendar has been followed. After his tenth R.Y. calculated by the solar calendar, Shahjahan instituted a fresh calendar for his regnal years in terms of the *Hijri* era, each year beginning from Jumada II, AH 1037.[10]

Similarly, Aurangzeb calculated his R.Y. in terms of the *Hijri* calendar each year beginning with the first of Ramazan. Most of the coins of these two Emperors give the *Hijri* year and when some of them give only the regnal year, it is a simple matter to convert them into *Hijri* years.

Coins of Dawar Bakhsh are included among the coins of Jahangir, and those of Shuja and Murad Bakhsh among the coins of Shahjahan.

This completes the first step, and the results are given in Table I appended to this paper. As the table shows, the variations from year to year are substantial, yet the trends are pretty well marked so that there are periods of different durations of which the coins preserved become markedly more numerous or as markedly scarce. This should be sufficient to meet a possible objection against our method, viz., that coins have survived in different proportions of the total issue at different times. For the survival rate should generally be higher with the passage of time. If variations were due to changes in the rate of survival, we should have expected a steady increase in the number of coins rather than these sharp fluctuations. Another possible objection may be that the collector's interest might have resulted in the preservation of certain curious coins and therefore artificially inflated the numbers of coins of certain years. Here again, since the Mughal rupees were by and large of a uniform type, in most fluctuations the curiosity of the coin-collector does not seem to have played a part. Where certain

[10] Hodivala, *Historical Studies in Mughal Numismatics* (Calcutta, 1923), p. 271.

curiosities are in fact found, such as the coins bearing the names of Nurjahan, and the *sawai* and *Jahangiri* rupees, they are so few as to hardly affect the totals. The only exceptions to this may be the preservation of the zodiacal coins, whose number in the 13th R.Y. of Jahangir appears to be large. But since the zodiacal coins were issued in the other years also, it is difficult to attribute the increase in the 13th R.Y. mainly to the industry of the coin collector. In the 13th year, the numbers of the ordinary rupee are also exceptionally large, so that the same tendency is exhibited in the ordinary rupees as in the special variety.

There is one further point to consider. It may be thought that our totals are built up of numbers of coins in collections which individually may be rich in coins in particular years or a particular period, so that the trends appearing from the total alone may be misleading. But in actual fact the trends witnessed in the aggregate are also witnessed in the totals of each individual collection. This is illustrated in Fig. 1, where the four curves show respectively the totals of coins year by year in the collections of the Lucknow Museum (*A*); the Lahore Museum and Rodger's personal collection (combined) (*B*); the Indian Museum and the British Museum (combined) (*C*), and the Bombay collection (*D*).[11]

One we are aware that the figures we have obtained of the coins issued each year are not mere accidental agglomerations but may probably reflect the ebb and flow of annual currency output in the Mughal Empire, we can go on to construct a curve based on these figures; and it may be treated for practical purposes as the currency output curve with the proviso, of course, that the actual scale for the curve cannot be determined. But in order to do this, for purposes of comparison and convenience of reference, we have to convert the *Hijri* and *Ilahi* years into years of the Christian era. Again, in order to spot the more stable trends it would seem better to attempt a histogram of five yearly totals, rather than a curve of annual totals.

The assumption that I have followed is that each *Hijri/Ilahi* year corresponds with that Christian year within which its major part falls. For the *Ilahi* years this creates little difficulty since each of them begins in March and thus corresponds in our scheme with the Christian year in which it commences; and since we are taking five yearly

[11] The British Museum collection is very small; it has, therefore, been combined with the collection of the Indian Museum, Calcutta.

periods the deviations from the true figures would be very small. With the *Hijri* years the conversion is not such a simple matter. These are lunar years; and each *Hijri* year is thus shorter than the Christian year by ten or eleven days. Therefore, after a lapse of some years, two *Hijri* years have corresponded with a single Christian year because the larger part of both falls within it. Now when this happens, that particular slab in our histogram would actually be representing not the total of five but of six years. In such cases[12] the total has been reduced by one-sixth in order to eliminate this artificial inflation of the total. It means admittedly that on the whole the height of the histogram would be lower during the period when the *Hijri* years were in use in comparison with that when the *Ilahi* era was followed. The mean deviation, however, would be less than 3 per cent which is the difference in the length of the solar and lunar years, and such a difference can be disregarded.

The histogram aims at representing the total of silver coins issued in Northern India. Therefore, (*a*) the initial year chosen is 1570 and not 1556; and (*b*) the issues of the Deccan mints have been excluded.[13] In this way although the number of mints from which the rupees were issued varied, the region remains unaltered and unaffected by the annexations made by the Mughals in the Deccan. The mints in Afghanistan have however been included, although Kabul was annexed only in 1585 and Qandahar was in Mughal occupation only for a part of the period.[14]

With this histogram in our hand, we are in a position to define periods when the silver currency output increased substantially or showed a marked decline. Both as a test for our assumption that it represents shifts in actual currency output and also for understanding its association with the pace of silver influx into the country from Europe, it is of some interest to compare it with the histogram of the

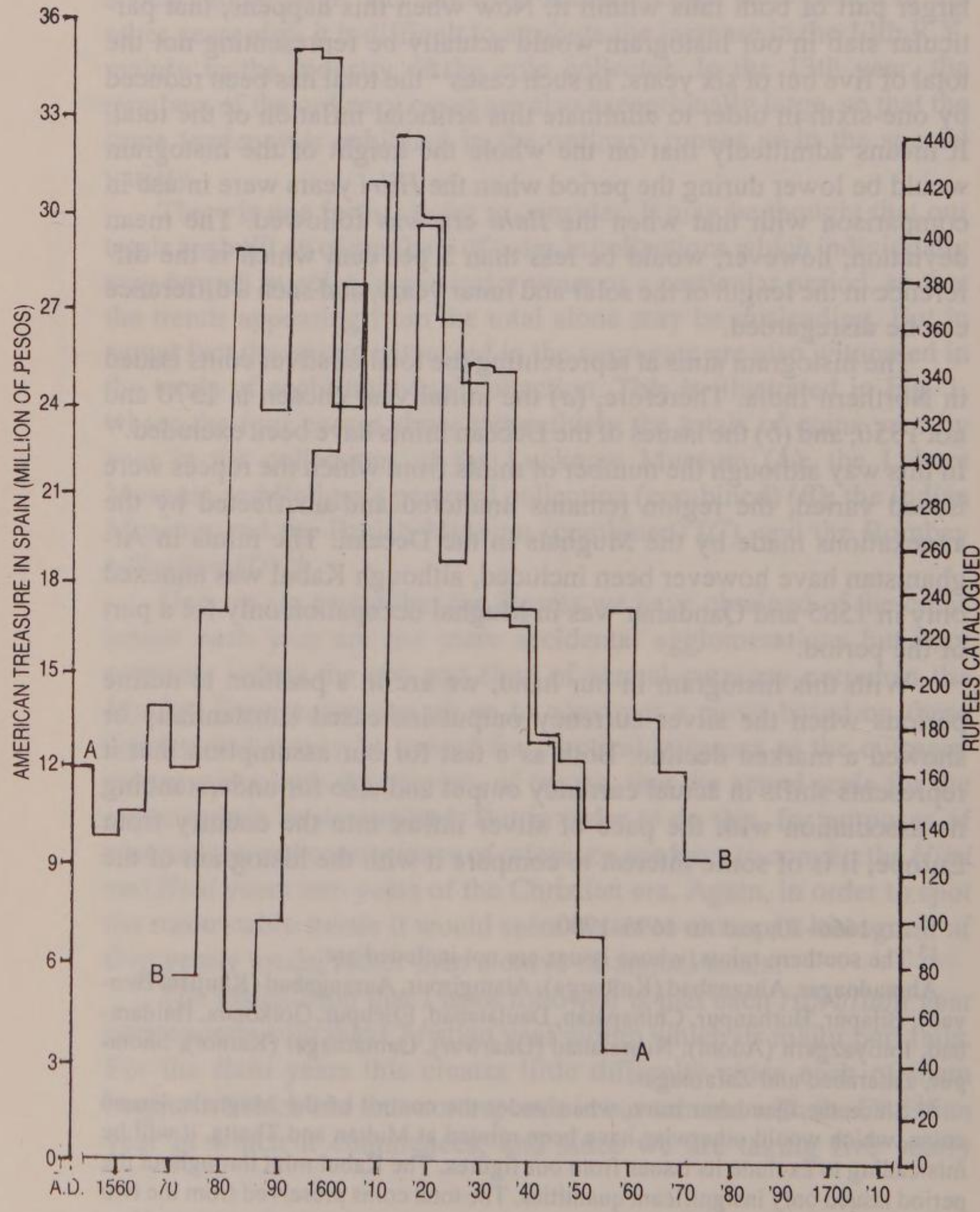
[12] AD 1666–70; and AD 1696–1700.

[13] The southern mints, whose issues are not included are:

Ahmadnagar, Ahsanabad (Kulbarga), Alamgirpur, Aurangabad (Khujista Bunyad), Bijapur, Burhanpur, Chinapatan, Daulatabad, Elichpur, Golkonda, Haidarabad, Imtiyazgarh (Adoni), Nusratabad (Dharwar), Qamarnagar (Karnol), Sholapur, Zafarabad and Zafarnagar.

[14] Since the Qandahar mint, when under the control of the Mughals, issued coins, which would otherwise have been minted at Multan and Thatta, it will be misleading to exclude its issues from our figures. The Kabul mint throughout the period issued only insignificant quantities. The total coins preserved from the two mints amount to Rs 243.7.

A AMERICAN TREASURE
B TOTALS OF RUPEES



five yearly volume of the import of American treasure into Spain based on the standard work of E.J. Hamilton.[15] Since at this time the American mines were all under Spanish control, these imports actually represented the vast bulk of silver[16] brought into the Old World from the New (except for such 'leakages' as were made through smuggling or by the English and Dutch plunder of Spanish ships).

Figure 2 offers a comparison between the data for the influx of American treasure into Spain and the five-yearly total of rupees preserved. It will be seen that the correspondence in the two histograms, allowing for a natural time-lag, is remarkable. Indeed, it seems that even minor ascents and descents in the first are reflected in the second. Thus the peak of the imports of American treasure reached in 1566–70 is reflected in a similar increase in Indian coins in 1576–80, while a decline in the Spanish treasure influx during 1571–75 is reflected in a similar decline in the Indian coins during 1581–85. The great and steady increase in the influx of American treasure, beginning with 1576–80 and reaching its greatest height in 1591–95 with only one decline (1586–90), has its counterpart in a similarly rapid increase of Indian rupees, beginning with 1586–90 and reaching the apex during 1611–15, with again one period of decline just preceding the last ascent (1606–10). It thus seems as if during this period it took about 10 to 20 years before silver reaching Spain could make its way to India, but it did ultimately arrive, and so regularly indeed that the fluctuations in the volume of silver imports into Spain could be faithfully reflected in the Indian imports of silver and the currency output of Mughal mints. The time-lag is not surprising, since during this period the Portuguese retained their monopoly of Europe's sea trade with India and their trade never attained very extensive proportions; and probably a very large part of the silver imports had to come overland and indirectly through the Middle East and Persia.[17]

[15] E.J. Hamilton, *American Treasure and Price Revolution in Spain, 1501–1652*, Harvard Univ. Press, 1934.

[16] Although the treasure includes gold, the share of gold was very small. Thus, whereas 18,000 tons of silver entered Spain from the Americas through official channel between 1550–1660, only 200 tons of gold entered similarly during this period, Heaton, *Economic History of Europe*, Revised Edition, New York, p. 289.

[17] *The Suma Oriental of Tomé Pires*, ed. by Armando Cortesão, Hakluyt Society (London, 1944), for silver exports to India from Aden, Ormuz and Pegu (vol. I, pp. 12–13, 21, 43, 44, 100); François Bernier, *Travels in the Mughal Empire*, ed. by V.A. Smith, pp. 202–3; *Indian Travels of Thevenot and Careri*, ed. S.N. Sen (Indian Records Series), Book II, p. 241.

With the coming in of the Dutch and the English, their trade dwarfing that of the Portuguese and their own two Companies involved in unceasing competition, one may expect that the silver imports from Europe would arrive much more rapidly into India and that, therefore, the lines of the two histograms should now approach very close to each other. This can be seen again in our diagram (Fig. 2) from 1611–15 onwards.

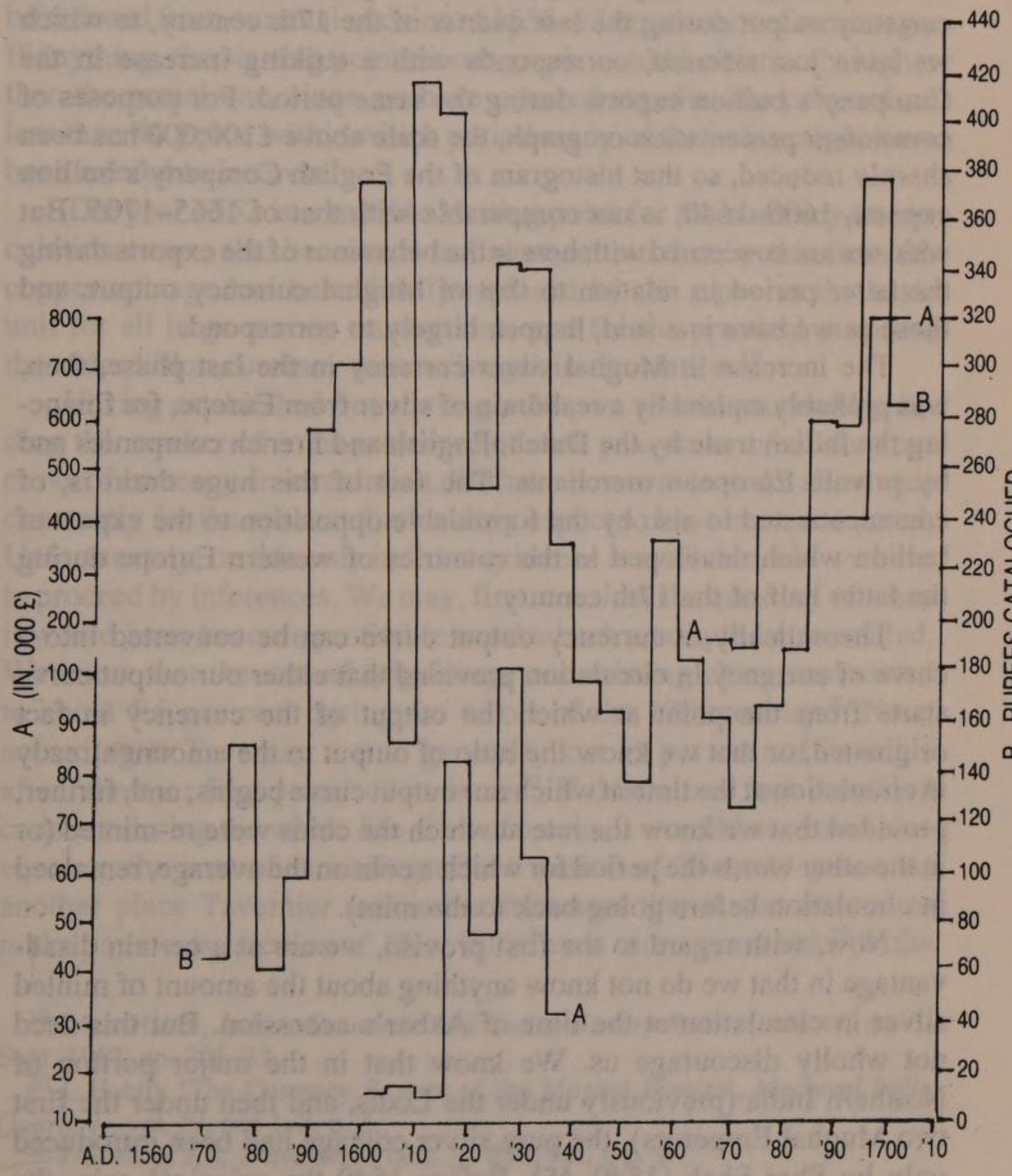
By 1621–25, the peak period of the influx of American silver into Spain seems to have passed and a steady decline sets in, which continues until 1660 when Hamilton's data close. This decline is faithfully followed by the totals of rupees in which there is a sharp decline between 1621–25, a short recovery during 1626–35 and then finally a decline lasting until 1651–56. During 1656–60, there is a sharp increase in the number of rupees which seems to be quite inconsistent with the decline of imports of American silver in Spain; and this is perhaps the only inconsistency that can be spotted in the comparison between the two histograms. This may possibly represent a kind of secondary wave in coinage output caused by the reminting of coins first minted during the period of the great influx fifty to thirty years earlier. Or, it may due to the fact that as the English and Dutch trade with India increased, they began to export not only out of current import from America, but also out of the reserves of silver accumulated in Europe; and that the rise in currency output in the later fifties is the first result of such a development.

Unfortunately I have not been able to obtain figures for the imports of silver into Europe from America after 1660. The production of American mines seems to have started to decline from 1630,[18] and it is not clear whether any recovery took place during the remaining part of the 16th century. Yet if the numbers of the surviving coins are any guide, Indian currency output began to increase from 1676–80, reaching its peak during 1696–1700, a peak only surpassed during the first two decades of the century. Here a comparison of our histogram of the Mughal currency output with such statistical information as we possess of the English East India Company's bullion exports may be useful. This information is set out in Table II, which takes some liberty with the available information in order to make it suitable for the construction of a histogram. Figure 3 shows this histogram together with the histogram of the Mughal currency output. Much the larger

[18] John Lynch, *Spain under the Habsburgs* (Oxford, 1964), p. 121.

A ANNUAL BULLION EXPORT OF THE ENGLISH EAST INDIA COMPANY

B RUPEES CATALOGUED



part of the rise in the English Company's bullion export represents merely the expansion of the Company's own trade, as it gained an increasingly large share of Europe's commerce with India. But some of the fluctuations are likely to correspond with those in the total of bullion exports to India. There does not, for example, seem to be any better explanation for the sharp decline in the Company's bullion exports during the thirties (whereafter our histogram shows a break). This corresponds, it will be seen, with the great drop in the Mughal currency output during the thirties. The great increase in Mughal currency output during the last quarter of the 17th century, to which we have just referred, corresponds with a striking increase in the Company's bullion exports during the same period. For purposes of convenient presentation on graph, the scale above £100,000 has been sharply reduced, so that histogram of the English Company's bullion exports, 1600–1640, is not comparable with that of 1665–1705. But what we are concerned with here is the behaviour of the exports during the latter period in relation to that of Mughal currency output; and these as we have just said, happen largely to correspond.

The increase in Mughal silver-currency in the last phase, then, was probably caused by a real drain of silver from Europe, for financing the Indian trade by the Dutch, English and French companies and by private European merchants. The fact of this huge drain is, of course, attested to also by the formidable opposition to the export of bullion which developed in the countries of western Europe during the latter half of the 17th century.

Theoretically, a currency output curve can be converted into a curve of currency in circulation provided that either our output curve starts from the point at which the output of the currency in fact originated, or that we know the ratio of output to the amount already in circulation at the time at which our output curve begins; and, further, provided that we know the rate at which the coins were re-minted (or in the other words the period for which a coin on the average, remained in circulation before going back to the mint).

Now, with regard to the first proviso, we are at a certain disadvantage in that we do not know anything about the amount of minted silver in circulation at the time of Akbar's accession. But this need not wholly discourage us. We know that in the major portion of Northern India (previously under the Lodis, and then under the first two Mughal Emperors), the pure silver coinage had been introduced only by Sher Shah (1540–45). Before 1540 the principal coin, the

tanka, was a piece with only a trace of silver in it. The total amount of coined silver in circulation, by 1552, would therefore have been less than the net amount of the total currency output since 1545 (i.e. total output less re-mintage). If, therefore, we total up the number of coins of each year from 1556 to 1592 and make no allowance for reduction on account of remintage, we will probably have a total which may in relative terms broadly represent the total amount in circulation. The amount of output of the period 1540–56, and of the kingdoms conquered by Akbar may be cancelled against the amount that should be reduced from our total of coins of 1556–92 on account of remintage. If anything, the starting point on our graph would be distinctly higher than the actual one, since we have counted together the coins of no less than 46 years, within which period many of the coins might have been minted twice over.

The year 1552 is a suitable starting point for the currency-in-circulation curve, also because it is almost certain that by this time the copper coinage had been finally replaced by the rupee as the basic unit for all large money transactions, and for the practical purposes the older billon currency was no longer in circulation.[19]

Having established our starting point, we should proceed by adding the number of coins preserved of each year so as to build up our curve of currency-in-circulation. We have however to make allowance constantly for the amount that we may expect to have been re-minted. Unfortunately, on this only indirect evidence is available, and we have to proceed by inferences. We may, first, consider the question of when it would have become profitable to take back a coin to be re-minted. We know that the rate of seigniorage and minting charge amounted to about 5.6 per cent during the whole of the 17th century.[20] Now, according to Tavernier a coin generally lost ½ per cent of its value after 'three or four years' of its issue.[21] If this rate of loss remained constant during the whole life-time of a coin, it would have lost value equal to the cost of reminting after a period of 33 to 44 years. At another place Tavernier makes the statement that it was normal to make payments in coins of 15 or 20 or even more years old.[22] If the

[19] Irfan Habib, *Indian Economic and Social History Review*, vol. IV, no. 3, Sept. 1967, pp. 205–32.

[20] I. Habib, 'The Currency System of the Mughal Empire', *Medieval India Quarterly*, vol. IV, nos 1–2, p. 3.

[21] *Travels of J.B. Travenier*, Trans. V. Ball, vol. I, p. 9.

[22] Ibid., p. 29.

bulk of the coins thus remained un-reminted after fifteen or twenty years, they could, on average, have been returned to the mint after a much longer period.[23] We can, therefore, broadly assume that coins minted in a particular year were largely reminted within a period of forty years.[24] On this basis we may adopt the rather rough and ready formula of fixing the allowance for remintage at 21/2 per cent of the coins already in circulation. I have accordingly added the coins of each year to the total, and deducted 21/2 per cent of the total before its addition, so as to obtain the relative figure for the currency in circulation during a particular year.[25]

If the curve now constructed (see Figs. 4, 5 and 6) represents, even very roughly, the actual curve of silver money in circulation, the following may be said of the trends shown by it:

1. The amount in circulation rose very steeply in a steady ascent from 1591 onwards, with just two short checks in the rise during 1606–1609 and 1620–28, and reached the peak around 1634, stabilizing at the level then reached until 1639. It was now exactly three times the amount in circulation in 1592.

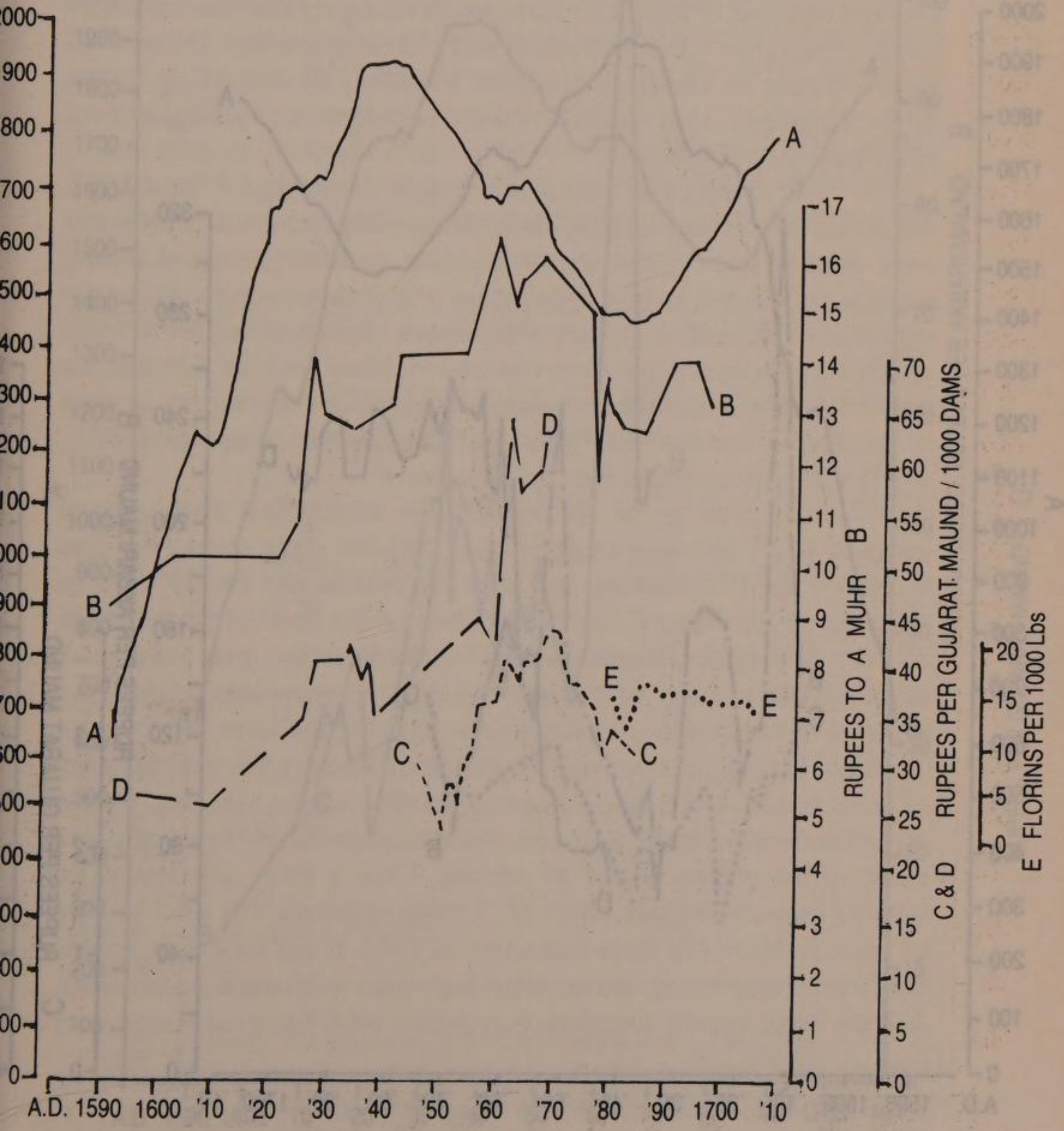
2. The amount in circulation started falling gradually 1640 and continued to do so till 1684, with only a small rise from 1556 to 1662. The total number of coins in circulation even after this was more than double of that in 1592. It is not possible in the light of the available data, to explain satisfactorily this fall. The curve should have estab-

[23] Hawkins, it is true, states that 'once in twenties years it (a coin) commeth into the King's power', *Early Travels in India*, ed. W. Foster (London, 1921), p. 112. It is not clear whether Hawkins means that a coin returned to the King's treasury once in twenty years (as has been supposed by I. Habib, 'Banking in Mughal India', *Contributions to Indian Economic History*, I, 1960, ed. T. Raychaudhuri, pp. 1–2) or that it came back for reminting. If he means reminting, the basis of his statement might have been the general absence of coins bearing any year more than twenty years earlier. However, since the number of coins catalogued, belonging to the period 1556–90 (578 Rs) is almost half of that of the period 1591–1610 (1125 Rs) Hawkins might reasonably be expected to have seen very few coins of twenty years earlier, and may have been misled as a result.

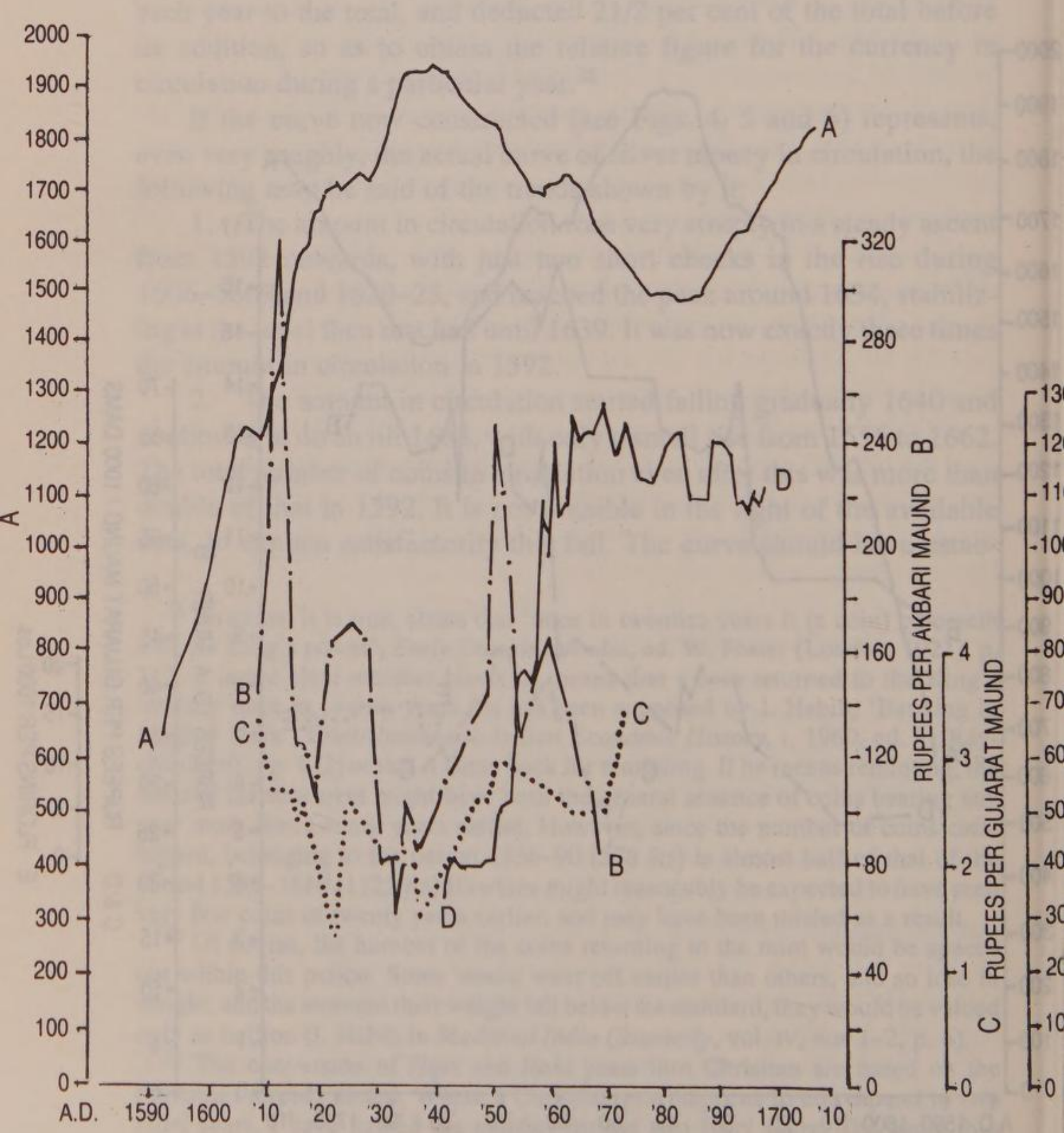
[24] Of course, the number of the coins returning to the mint would be spaced out within this period. Some would wear off earlier than others, and so lose in weight; and the moment their weight fell below the standard, they would be valued only as bullion (I. Habib in *Medieval India Quarterly*, vol. IV, nos 1–2, p. 6).

[25] The conversion of *Hijri* and *Ilahi* years into Christian are based on the principles already stated. Where a Christian year happens to correspond to two *Hijri* years, I have halved the number for the two *Hijri* years. The years thus affected are AD 1666 and 1699.

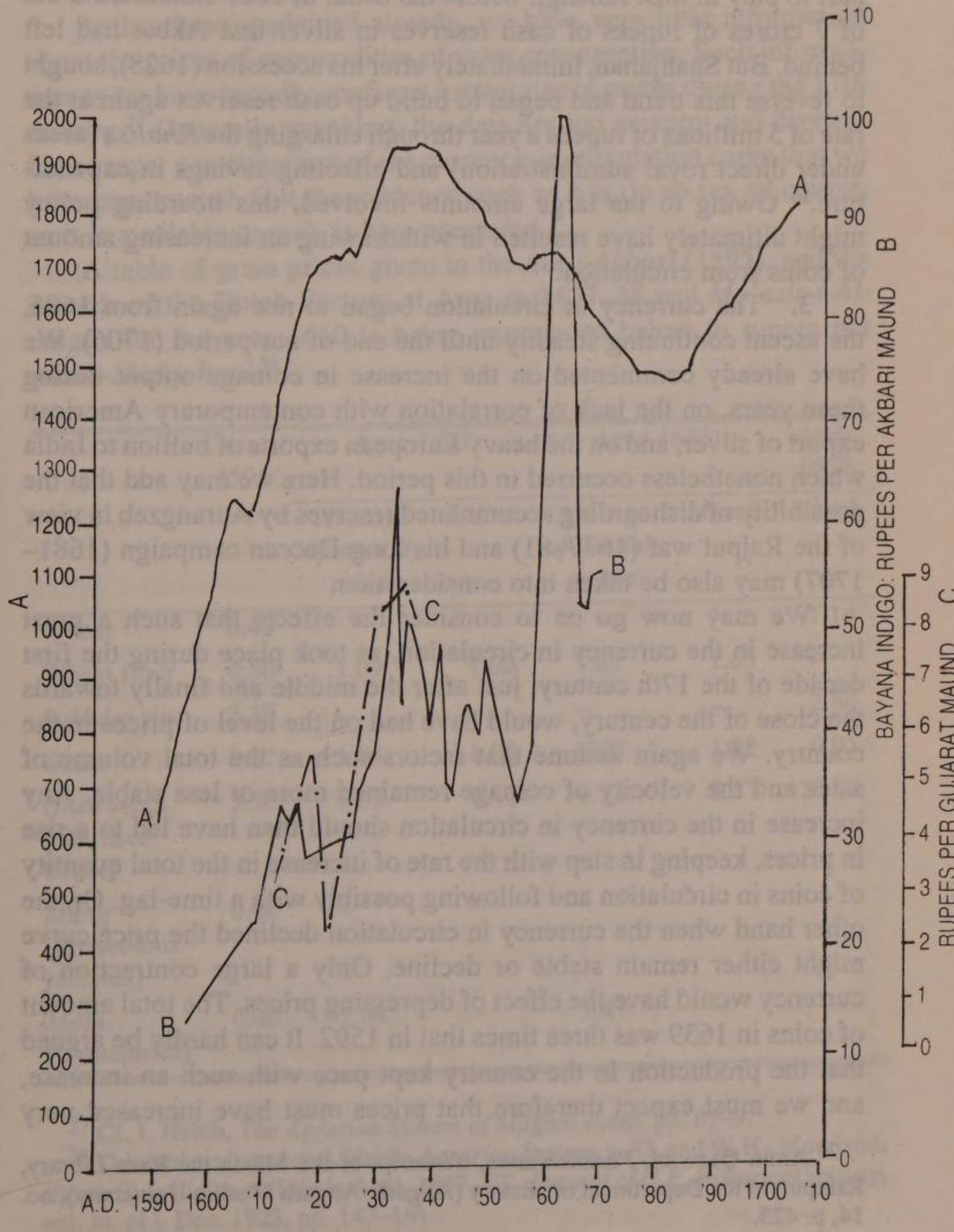
A CURRENCY IN CIRCULATION
B RUPEES PER MUHR
C COPPER PRICES IN BENGAL
D RUPEES PER 1000 DAMS
E COPPER PRICES AT SURAT


A
B
D
E
C
RUPEES TO A MUHR B
RUPEES PER GUJARAT MAUND / 1000 DAMS C & D
FLORINS PER 1000 Lbs E
A.D. 1590 1600 '10 '20 '30 '40 '50 '60 '70 '80 '90 1700 '10

A CURRENCY IN CIRCULATION
B QUICKSILVER PRICES IN GUJARAT
C PRICES OF LEAD IN GUJARAT
D PRICES OF CLOVES AT SURAT



A CURRENCY IN CIRCULATION
B BAYANA INDIGO
C PRICES OF SUGAR IN GUJARAT



lished whether the import of silver decreased or not, for there is no evidence of re-export of silver on any large-scale during this period, and hoarding is not likely, in view of the falling price of silver. It is possible however that the imperial financial policy might have had a part to play in this. Jahangir before his death in 1627 exhausted 6 out of 7 crores of rupees of cash reserves in silver that Akbar had left behind. But Shahjahan, immediately after his accession (1628), sought to reverse this trend and began to build up cash reserves again at the rate of 5 millions of rupees a year through enlarging the *Khalisa* (areas under direct royal administration) and effecting savings in expenditure.[26] Owing to the large amounts involved, this hoarding policy might ultimately have resulted in withdrawing an increasing amount of coins from circulation.

3. The currency in circulation began to rise again from 1685, the ascent continuing steadily until the end of our period (1706). We have already commented on the increase in coinage output during these years, on the lack of correlation with contemporary American export of silver, and on the heavy European exports of bullion to India which nonetheless occurred in this period. Here we may add that the possibility of dishoarding accumulated reserves by Aurangzeb in view of the Rajput war (1679–81) and his long Deccan campaign (1681–1707) may also be taken into consideration.

We may now go on to consider the effects that such a great increase in the currency in circulation, as took place during the first decade of the 17th century, just after the middle and finally towards the close of the century, would have had on the level of prices in the country. We again assume that factors such as the total volume of sales and the velocity of coinage remained more or less stable. Any increase in the currency in circulation should then have led to a rise in prices, keeping in step with the rate of increase in the total quantity of coins in circulation and following possibly with a time-lag. On the other hand when the currency in circulation declined the price curve might either remain stable or decline. Only a large contraction of currency would have the effect of depressing prices. The total amount of coins in 1639 was three times that in 1592. It can hardly be argued that the production in the country kept pace with such an increase, and we must expect therefore that prices must have increased very

[26] Amin Qazwini, *Padshahnama*, transcript of the MS in the Raza Library, Rampur, in the Department of History (Aligarh: Aligarh Muslim University), no. 14, p. 423.

sharply during this period. On the basis of the considerations set out above we should expect that the decline in the currency in circulation after 1639 would not have had either a depressing or stabilizing effect on prices. Finally, a general ascent in the price-level may be expected for the last two decades of our period.

As has been explained already, we have very little information about the prices of commodities of mass consumption. Such information as we have broadly confirms a great rise in prices during the 17th century.[27] Generally speaking, the data are too scrappy and diverse, for a proper corroboration of the currency-in-circulation curve that we have constructed. But the evidence such as it is (in so far, of course, as it is available to me), is here presented.

A table of grain prices given in the *Ain-i-Akbari* (1595), and the records of the Dutch Factory at Agra in 1637–38 and *Ma'asir-i-Al-magiri* for the year 1660 is being reproduced below in rupees per *man-i-Shahjahani.*[28]

	Ain 1595	*Agra 1637*		*Agra 1638*		*Agra* 1669
		Average of monthly prices	*March*	*Average of monthly prices*	*March*	*March*
Wheat	0.40					1.14
Wheat flour	0.50	1.09	1.00	1.69	1.63	–
Sukhdas rice	3.33	–	–	–	–	2.86
Gram	0.27	1.05	1.00	1.70	1.82	0.95
Ghee (Clarified butter)	3.50	8.53	8.46	9.73	8.57	10.00
Mung (Phaseolous radiatus)	0.60	–	–	–	–	–
Moth (Lymantriid)	0.40	1.04	–	1.47	–	–

[27] Cf. I. Habib, *The Agrarian System of Mughal India*, pp. 81–9.

[28] This table is based on I. Habib, *Agrarian System*, p. 83, and W.H., Moreland, 'Some Side Lights on Life in Agra, 1637–39', *Journal of U.P. Historical Society*, vol. III, pt I, Dec. 1923, pp. 147–161.

There can be a number of criticisms of this table, because it is not certain whether the *Ain-i Akbari* prices refer to Agra at all, or that the 1637–38 prices were not affected by adverse weather conditions. The Agra prices of 1669 are however distinctly said to be those of a very good harvest. On the whole however the trend is clear and justifies the view that the prices of most of these commodities (wheat, grain and *ghee*) increased by at least three times.

The commodities about which greater details are available are generally either gold or copper, or commodities mentioned in European sources. In either case, the commodities are those which were greatly involved in oversea trade. Since the oversea trade with Europe had increased tremendously during the 17th century, we should have expected the prices of imports to have gone down and the prices of exports to have risen, depending in the latter case upon the share of the total production directed towards the foreign market. The trends in the imports and exports have thus to be studied separately.

In Fig. 4[29] an attempt has been made to reconstruct the curve of gold and copper prices based on different sources of information[30] and setting these off against the curve showing the total currency in circulation. Gold and copper were both import commodities, yet we find a common tendency towards a marked ascent from around 1595 until 1665, when the peak is reached. Both gold and copper prices have striking similarity with the movements of the currency in circulation curve. In the gold-price curve there is a rise up to 1641; then the curve stabilizes (this is the same period when our currency-in-circulation curve starts descending). The gold price rises again and reaches the peak in 1658. Afterwards it inclines towards a fall, reaching the lowest point in 1676. This synchronizes with the steady fall in silver currency in circulation as shown by our curve. But it might also be due in part to the influx of gold from Japan.[31] After 1676,

[29] Prices of all the commodities given in different units of weights in the sources, have been converted into one of those units.

[30] Curves *A* and *B* are based on the figures collected by K. Glamann, 'The Dutch East India Company's Trade in Japanese Copper', *The Scandinavian Economic History Review*, I, no. I, pp. 41–9. The copper prices forming the basis for Curve *B* are given in florins in the Dutch records. But these are reconversions from rupees at a fixed book-rate of 30 stuivers to the rupee, so that the curve directly represents price-fluctuations in terms of rupees.

Curves '*C*' and '*D*' are based on the figures given in I. Habib, *Agrarian System of Mughal India*, pp. 380–94.

[31] For Japan's 'export boom' in gold during this period, see Glamann, *Dutch*

gold-prices underwent fluctuations, possibly rising until a sharp fall occurred about the mid-nineties.

The copper-coin price (*dam*: rupee) curve shows a remarkable ascent, from 1609 until 1959–68. This curve stops just at the time when the fall in currency in circulation becomes considerable and would be expected to influence the price movements. The copper (bullion) price rises upto 1671, with a period of stability during 1661–66; and then a decline, at a very steep rate, sets in. The copper bullion price rises again in 1682–87 and then shows comparative stability with however a slight inclination towards a fall.

Three other import commodities, of which data are available in more or less continuous series for certain periods, are lead and quick-silver in Gujarat and cloves at Surat (curves plotted on Fig. 5).[32] The data for lead show three big gaps viz. 1618–1622, 1638–46, and 1651–58. There is a distinct downward trend during the earlier period 1609–1623, but afterwards there follows an ascent with great fluctuations. The curve shows comparative stability from 1660 onwards. The fluctuations in the price of quick-silver are remarkable. Its prices too, like that of lead, have a downward tendency, with sharp fluctuations, upto 1636–40. Afterwards, the curve shows a rise, followed by a decline during the years 1650–68. Unfortunately, the curve stops in 1668, and we cannot compare it further with the other two curves of lead and cloves. The great fluctuations in the price curve of quick-silver may have been the result of very large imports by the competing Dutch and English Companies or the result of the cornering of the trade by Indian merchants.[33] The prices of cloves at Surat (beginning

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Asiatic Trade, pp. 58, 63.

[32] Figures for the price curve of quick-silver are collected from *Letters Received*, vol. I, 32, 235, 305, vol. II, 180–81, 193–263; vol. III, 9, 86; vol. IV, 296; vol. V, 106, 135; vol. VI, 160, 249–50. *Supplementary Calendar*, 56, 58, 62, 101, 110. *English Factories in India*, ed. Foster, *1618–21*, 55; *1622–23*, 162; *1624–29*, 64, 92, 242; *1630–33*, 89, 103, 180, 206, 213, 275; *1634–36*, 23, 82, 143, 205; *1646–50*, 188, 249. 282; *1651–54*, 252; *1655–60*, 199; *1661–64*, 210, 381; *1665–67*, 31; *1668–69*, 3, 24. *Travels of Peter Mundy*, vol. II, 147, 148, 149, 153. Figures for the price curve of cloves have been taken from K. Glamann, *Dutch Asiatic Trade, 1640–1740*, pp. 301–2.

[33] Figures for the price curve of lead have been taken from *Letters Received*, vol. I, 32, 33; vol. II, 193; vol. III, 8, 9, 32, 44; vol. IV, 296–336; vol. VI, 159. *Supplementary Calendar*, ed. Foster, pp. 68, 71, 110. *English Factories in India*, ed. Foster, *1622–23*, 334; *1630–33*, 32; *1634–36*, 134, 205, 218; *1637–41*, 98; *1646–50*, 84, 206, 282; *1655–60*, 199; *1661–34*, 210; *1668–69*, 3, 24, 190, 199; *1670–77* (Western Presidency), 283.

AD 1641) show an increase which broadly synchronizes, at least in its initial stages, with the last and final rise in the quick-silver price curve. The price of cloves seems to have reached its high points during the sixties, whereafter it tended to stabilize with a very slight tendency towards decline. But in the trade in cloves too there was a great deal of disturbance due to the monopolizing measures of the Dutch Company. However, the price curves of lead and cloves have great similarity during the period starting from 1637; and all the three curves show considerable correspondence in their decline and rise during the period 1630–50. On the whole, the price curves of these three commodities follow patterns which fit neither that of the currency-in-circulation curve nor of the gold and copper price curves.

The export commodities for which prices are available are indigo and sugar. In Fig. 6 the price curve of the Bayana indigo, the best variety, has been plotted, with its initial point in 1595 and its final in 1670. Sugar prices available are those reported for the ordinary powered variety, mainly from Ahmadabad and Surat during the period 1613–1639.[34]

The behaviour of the price of the Bayana indigo shown by the curve is extremely interesting. There is a steady and proportionately very rapid rise beginning after 1595 and continuing right till 1634, the price having gone up by nearly five times. While the increase in European demand might have played a part in this rise, it is difficult to attribute this ascent to that factor alone. After 1634, there is a decline so that ultimately the price stabilized around a figure roughly three times the price of 1595. This may well be because of the new competition from the indigo plantations of the West Indies which resulted in the falling off of the European demand. But in part, it may also reflect the decline in the money in circulation with which, as can be seen from our diagram, the decline in price largely synchronizes. After 1655 there is another great rise in the price of indigo, the apex being reached in 1663 and 1664. This again corresponds to the increase in

[34] For the curve of Bayana indigo, see the table of prices in I. Habib, *The Agrarian System of Mughal India*, pp. 86–8. For certain additional data not cited there: *Supplementary Calendar*, ed. W. Foster, pp. 53–4, 65; *English Factories*, ed. Foster, *1630–33*, p. 328.

For curve of Gujarat sugar see *Letters Received by the East India Company from its Servants in the East*, vol. I, pp. 305–6. *English Factories, 1618–21*, 102; *1622–23*, 109; *1624–29*, 221; *1630–33*, 52, 61; *1634–36*, This curve shows half of the actual figures, 42, 177; *1637–41*, 192.

the currency in circulation during the period 1658–63, although drought in this case might have been a contributory factor for the increase in price. The sharp decline in the late sixties can be attributed to better crops as well as to the cumulative effects of decline in currency-in-circulation which began again in 1664.

The Gujarat sugar curve shows a remarkable correspondence with the Bayana indigo carve although the period it covers is much shorter. A general rise is unmistakable throughout the period 1613–1635 with a slight decline in or before 1639. It can hardly be thought that sugar was produced extensively for the foreign market; and therefore its price could hardly have been determined by the fluctuations in foreign demand. The rise in the price of sugar, a rise by which the price more than doubled in a matter of ten years, between 1613–23, could only have been the result of the great increase in currency in circulation during this period.

As explained at the beginning of the paper, my chief concern has been to test whether a rather simple device, namely, the tabulation of the surviving coins year-wise will not give us what would in effect be a currency output curve, and then a currency-in-circulation curve for northern India during the Mughal period. The broad consistency of the curves of total coins in individual collections has shown that the histogram of five yearly totals of the rupees catalogued may be accepted as broadly representing the histogram of five-yearly output of rupees from North Indian mints. Our comparison of this histogram with the histogram of the import of American treasure into Spain has revealed a surprising degree of correspondence, which suggests very strongly that the silver influx into Europe was duly extended to India during the last years of the 16th and earlier part of the 17th century.

Having converted, on the basis of certain hypotheses, the currency output curve into a currency-in-circulation curve, we have then tried to establish whether there is some correlation between this and the price curves of various commodities. Naturally complete consistency or conformity cannot be looked for because various factors such as the harvests, monopolization, sharp fluctuations in production and imports (in the case of commodities of limited consumption, in particular), expansion or contraction in monetization, etc., would have played a very great role in determining the price curve of each individual commodity; and in many cases such factors were either very significant or remain unknown to us. But when we find that prices of important commodities (both imports and exports) rise markedly

during the first half of the century, largely in the same manner as the total amount of rupee-coins in circulation, we may be allowed to infer that the price changes were largely influenced by the influx of silver from Europe. But final judgement must, of course, be postponed until the time that the various major lacunae in our information are filled, and the economic history of the 17th century is placed on a surer foundation.

POSTSCRIPT

Since compiling the above I have come across the extremely interesting data about the English East India Company's exports of gold and silver to the East during the latter part of the 17th century, set out in K.N. Chaudhuri's recent paper, 'Treasure and Trade Balances: The East India Company's Export Trade, 1660–1720' in the *Economic History Review*, second series, Vol. XXI, No. 3, 1968.

The information given by Chaudhuri is not only at variance with that given in S.A. Khan, *East India Trade in the Seventeenth Century*, but is also better for my purpose since it gives the totals of silver exports separately.

Table 3 compares (*A*) the East India Company's silver exports (based on Chaudhuri's statistics), and (*B*) the Mughal silver currency output, based on the numbers of coins preserved. The figures for the five years 1661–65 have been used as base, = 100.

It will be seen that the Mughal currency output does not increase in the same proportion as the total value of East India Company's silver export. But the dramatic rise in these exports in 1676–80 and that again in 1696–1700 are immediately reflected in distinct upward swings in Mughal currency output during the same periods.

TABLE 1

NUMBER OF RUPEE (AND FRACTIONAL) COINS CATALOGUED (ANNUAL TOTALS)

Year	*No. of coins*	*Year*	*No. of coins*
	Akbar		
AH 963	31½	987	32½
964	13	988	25
965	10	989	20
966	6	990	10
967	14	991	7
968	6	992	6
969	8½	993	17
970	16	994	7
971	12	995	15
972	7	996	18
973	11	997	18
974	7	998	40½
975	17	999	26
976	9	1000	55
977	15½	38	73
978	41½	39	76½
979	12	40	45
980	17	41	50½
981	14½	42	62½
982	12	43	63½
983	19	44	67
984	31	45	60
985	32	46	83
986	28	47	68
		17	52½
		18	35½
48	77–¾	19	62

Year		*No. of coins*	*Year*		*No. of coins*
	49	75		20	57
	50	73–½		21	31–½
				22	79–3/4
		Jahangir			*Shahjahan*
Ilahi	1	39	*Ilahi*	1	39
	2	29½		2	90
	3	14		3	82
	4	21		4	94
	5	49½		5	83
	6	62		6	73½
	7	104		7	63½
	8	100		8	48½
	9	89½		9	44
	10	82		10	56
	11	106			
	12	69			
	13	107½	AH	1048	45½
	4	53		1049	49
	15	64½		1050	34¾
	16	45		1051	33
	1052	38		107	426
	1053	28½		1075	26
	1054	41½		1076–1077	27.34
	1055	35½		1078	24
	1056	35½		1079	25
	1057	41½		1080	20½
	1058	34½		1081	31
	1059	31		1082	32
	1060	22		1083	28
	1061	28		1084	20
	1062	35		1085	26

Year	*No. of coins*	*Year*	*No. of coins*
1063	19½	1086	22
1064	36	1087	24
1065	20	1088	34
1066	45	1089	36
1067	36	1090	38½
1068	58	1091	33½
1069	53	1092	28
		1093	41½
		1094	33
	Aurangzeb	1095	36½
		1096	49
1070	39	1097	49
1071	47½	1098	54
1072	52	1099	66
1073	36	1100	54
1101	55	1111	89
1102	63	1112	55½
1103	55	1113	49
1104	53	1114	51
1105	43	1115	57½
1106	63½	1116	59
1107	55	1117	69
1108	63	1118	57½
1109	61	1119	9
1110	43		

TABLE 2

ANNUAL BULLION EXPORTS OF THE ENGLISH EAST INDIA COMPANY

Years	£	*References*
1601–05*	16,451	K.N. Chaudhuri, ibid., p. 115
1606–10	17,260	K.N. Chaudhuri, ibid., p. 115
1611–15	15,667	K.N. Chaudhuri, ibid., p. 115
1616–20	82,515	K.N. Chaudhuri, ibid., p. 115
1621–25*	47,740	K.N. Chaudhuri, ibid., p. 115
1626–30*	106,750	K.N. Chaudhuri, ibid., p. 115
1631–35*	63,100	K.N. Chaudhuri, ibid., p. 115
1636–40*	31,333	K.N. Chaudhuri, ibid., p. 115
1666–70*	166,152	S.A. Khan, ibid., p. 168; figures from 1667–8 to 1670–71
1671–75*	144,140	S.A. Khan, ibid., p. 168; figures from 1671–72 to 1673–74; Macpherson
1676–80	400,000	S.A. Khan, ibid., p. 269
1681–85	400,000	S.A. Khan, ibid., p. 269
1686–90*	400,000?	S.A. Khan, ibid., p. 269; Figures only for the year 1691
1696–1700*	800,000	S.A. Khan, ibid., p. 270
1701–1705*	800,000	S.A. Khan, ibid., p. 270

* Information is not available for the whole period of five years and the annual average is based only on information or estimate for a part of the period.

TABLE 3

A COMPARATIVE TABLE OF THE EAST INDIA COMPANY'S SILVER EXPORTS, AND THE MUGHAL SILVER CURRENCY OUTPUT

Years	*A*	*B*
1661–65	100	100
1666–70	124	88
1671–75	168	68
1676–80	457	90
1681–85	630	102
1686–90	71*	151
1691–95	330	150
1696–1700	750	204
1701–1705	186*	154

* Incomplete figures.

Chapter Six

Precious Metal Flows and Prices in Western and Southern Asia, 1500–1750: Some Comparative and Conjunctural Aspects

SANJAY SUBRAHMANYAM

At the present juncture, monetary history and the history of climate seem to offer to the researcher two of the most exciting points of entry into the early modern period; these are points of entry which, by their very nature, permit one to transcend the compartmentalized approach decried of late by several scholars, including, in the South Asian case, Frank Perlin.[1] If climatic history has permitted, in recent years, the attempt to unify European and Asian phenomena in the seventeenth century, historians of trade for their part have used flows of coinage metal (and other currency media like cowries) to link the history of western Europe to that of Africa and India, and the history of the New World to processes taking place in China.[2] In the present essay, a

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[1] Frank Perlin, 'Proto-industrialization and Pre-colonial South Asia', *Past and Present*, 98, 1983, pp. 30–95; *Idem.*, 'Money-Use in late pre-colonial India and the international trade in currency media' in J.F. Richards, ed., *The Imperial Monetary System of Mughal India* (Delhi, 1987), pp. 232–373.

[2] CF. W.S. Atwell, 'Some Observations on the "Seventeenth-Century Crisis" in China and Japan', *The Journal of Asian Studies*, 45, 2, 1986, pp. 223–44;

modest attempt is made to extend the ambit of the discussion somewhat by focusing systematically on two areas which are seldom studied together: namely, west Asia and south Asia. One part of the analysis will be aimed at seeing southern and western Asia together in a conjunctural fashion, focusing, in particular, on the issue of flows of coinage metal, while the other will be aimed at a comparative discussion of the principal building-blocks of the historiography in the two cases. The underlying idea, it should be stressed, is not to construct a Braudelian 'super world-economy', which embraces the two regions while at the same time setting them apart from the 'Rest of the World'. Rather, one wishes to argue that there is more to the 'external relations' of these two regions than their 'integration into the European world-economy'. As such then, this paper may be seen in part as a plea to widen the comparative perspective rather than an attempt to narrow it down.

From the perspective of the Europeanist, west Asia and south Asia both form part of the monetary 'other', the areas which received, in a more or less unending stream, the metallic lifeblood of the European economy. This process of continual 'bleeding' (*sangria*)—the phrase is Magalhães Godinho's)—has been linked in the past to a wide variety of societal changes, as well as structural features, which obtained in south and west Asia. Some of these parallel those which obtained in Europe: thus, the inflation of ranks and titles, and changes in prebendal and fiscal systems in sixteenth century Europe and west Asia are linked by some (like Braudel) to the unifying force of monetary flows.[3] But equally, there have been attempts to distinguish—often in a radical fashion—the function and character of money in the Orient and in the Occident; here the Near East, which lies astride the Suez, occupies the uneasy position of halfway house.[4] In part, this paper reviews some of the more common constructs to be encountered in the historiog-

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Harriet Zurndorfer, 'The "new" social and economic history of China (1000–1800)', *International Review of Social History*, 33, 2, 1988, pp. 148–201, especially pp. 178–181. On non-metallic currency media, Jan Hogendorn and Marion Johnson, *The Shell Money of the Slave Trade* (Cambridge, 1986).

3 Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, trans. Siân Reynolds, 2nd edition, 2 volumes (London, 1972), vol. II, pp. 681–701, passim.

4 Cf. Rudolph C. Blitz, 'Mercantilist policies and the pattern of world trade, 1500–1700', *The Journal of Economic History*, 27, 1967, pp. 39–55; Blitz contrasts Oriental irrationality to the western *homo economicus* in a well-nigh 'classic' picture.

raphy in these two respects, such as the 'Price Revolution' posited for the Ottoman Empire by Ömer Lütfi Barkan, and for the Mughal Empire by Irfan Habib. A second specific issue is the relationship between this and other money-related phenomena, and a wider set of changes in institutional arrangements, be it the so-called *jagirdari* crisis of the Mughal Empire, or the emergence of the so-called *çiftlik* in Ottoman domains. Besides, we shall be concerned to note variations in the monetary system within the two regions as opposed to across them; some conclusions will also be broached on the links between state power and its manifestation through the currency system. But before entering into these questions, we may begin with a consideration of flows of coinage metal, and the role of west and south Asia in this respect.

Precious Metal Flows: 1500–1750

In a classic description of trade in the western Indian Ocean in the sixteenth century, Vitorino Magalhães Godinho concludes that the nature of transfers of metal was as follows:

> In sum: from the Persian Gulf to India, together with a thread of gold, there runs a copious river of silver; from the Red Sea, on the other hand, it is a golden river that runs, in which a slender argentine brook is intermingled.[5]

But where did these metals originate? At least a part of the answer lies in southern and eastern European production, with Sudan accounting, in the fourteenth and early fifteenth centuries, for another significant segment. Where gold is concerned, Marion Malowist has demonstrated the shifts in production in the Hungarian mines between the early thirteenth and mid-fifteenth centuries: from an annual average for the period 1200–1325 of roughly 1,000 kilograms, production rises in the decade 1325–85 to 3,000 to 4,000 kilograms per year, but then declines in the following six decades to an annual average of around 1,500 kg.[6] Supplementing this production, and at times even dominating it, is gold from Sudan, which is exported to Genoa in the

[5] Vitorino Magalhães Godinho, *Os Descobrimentos e a economia mundial*, 2nd edition, 4 volumes (Lisbon, 1981–84), vol. I, p. 232.

[6] M. Malowist, 'Problems of the growth of the National Economy of Central-Eastern Europe in the late Middle Ages', *Journal of European Economic History*, 3, 1974.

fourteenth century at a rate of 400 to 600 kilograms a year; later, in the fifteenth century, Portuguese expansion down the west coast of Africa brings Lisbon access to Sudanese gold, brought to the coastal ports by trans-Saharan caravans.[7] Besides Hungarian and Sudanese gold production and export, we must bear in mind silver as well. Here, Bohemian production, which, in the fourteenth century, accounted for roughly half of that of all Europe, varied in the period 1300 to 1350 from twenty to twenty-four tonnes a year; in the fifteenth century however, there is a considerable contraction, and the growth in other Balkan and German silver production does not quite compensate for the Bohemian decline.[8] This leads to the well-known 'great bullion famine' of the fifteenth century in Europe, particularly marked in the period 1440 to 1460, when billon and copper coinage is increasingly employed to substitute for high purity gold and silver coinage.

These shifts in the production and circulation of metal can be linked in the European case to numerous other phenomena; if Godinho argues that bullion hunger was a major motive for European expansion, others suggest that the dominance of Venice over its Italian competitors in the latter part of the fifteenth century can be explained largely through superior access to gold and silver, which were a major source of advantage in the Levantine trade.[9] For even during the bullion famine, the 'bleeding' of Europe continued. The means changed though as time passed.

One mechanism for the transfer of bullion eastward was the chronic 'current trade deficit' (to use an anachronistic and problematic term favoured by some recent authors) which existed between Europe and Asia. It has been calculated by John Day that Venice alone in the fifteenth century exported the equivalent of one metric ton or more of gold annually to the Levant; this could equally be expressed as ten to twelve metric tonnes of silver. Further, if one accepts E. Ashtor's view that the Venetian 'deficit' accounted for three-quarters of the total European 'deficit', we arrive at a transfer each year from Europe to the Levant by way of trade of the equivalent of thirteen to sixteen tonnes of silver.[10]

[7] Godinho, vol. I, pp. 140–82.

[8] John Day, 'The Great Bullion Famine of the Fifteenth Century', *Past and Present*, 79, 1978, pp. 3–54, especially pp. 35–6.

[9] Ibid., p. 32.

[10] Eliyahu Ashtor, *Les métaux precieux et la balance des payements du Proche-Orient à la Basse époque* (Paris, 1971), p. 96.

This however was not the only means of transfer. Even in the fourteenth century, a part of the Sudanese production of gold had reached west Asia directly; we may recall the well-known instance of the large gold-bearing caravan that arrived at Mecca from Sudan in 1324 as part of the pilgrimage of Mansa Musa.[11] Besides, as the fifteenth century progressed, Ottoman expansion brought several of the eastern European mines under their direct control: these included Novobrdo (1440), Srebernice (1445) and Kratovo (1490).[12] These continuing flows in the eastward direction permitted the transformation of the Ottoman monetary system in the passage from the early to the late fifteenth century. In the close of the fourteenth century, the west Asian and north African states had experienced something of a 'bullion famine' themselves, which lasted from perhaps 1398 to 1415. The Mamluk Sultanate was badly affected by what the early fifteenth century writer al-Qalqashandi spoke of explicitly as a decline in metal imports from 'the country of the Franks'.[13] But from the 1420s, a recovery is visible. Venetian exports, to the Levant, of coins and other precious metal attain a level by 1423 of 500,000 ducados and this—together with the acquisition of the eastern European mines mentioned earlier—is a catalyst for changes in the Ottoman monetary system introduced under Mehmet II (r. 1451–81). The small silver *akçe* coins (weighing roughly 1.15 grams) which had been issued in the fourteenth and early fifteenth centuries by the petty *beylik* states of Anatolia are replaced after 1470 by the so-called *akçe-i buzurk* (large *akçe*) of over ten grams, as well as by the *gumuş sultaniye*.[14] And in addition to these, the Ottoman state also begins to mint a gold coin, the *sultani*, which we may see as forming a part of Godinho's 'river of gold' from the Red Sea to south Asia.

Thus, at the point in time when the Portuguese enter the trade of the Indian Ocean (*c.* 1500), a flourishing trade existed between western and southern Asia in coinage metal. On the one hand, the Venetian *zecchino*, together with the Egyptian and Ottoman *sultanis* and the

[11] Cf. N. Levtzion, 'The Thirteenth and Fourteenth-Century Kings of Mali', *Journal of African History*, vol. IV, 1963, pp. 341–53.

[12] Halil Sahillioglu, 'The role of international monetary and metal movements in Ottoman monetary history, 1300–1750', in J.F. Richards, ed., *Precious Metals in the Later Medieval and Early Modern Worlds* (Durham, 1983), pp. 269–304, especially p. 272.

[13] Cited in Day, p. 32.

[14] Sahillioglu, pp. 270–1.

dinars of Aden, dominate imports into south-west India; on the other hand, trade from the Persian Gulf port of Hormuz to Gujarat, western India and Bengal brought silver in plenty to the latter areas, particularly in the form of the *lari*.[15] In part, Hormuz's imports were paid for by other means, in particular horses. In 1516–17, exports to India were in the region of a thousand head of horse, and by mid-sixteenth century, the number had doubled. But, as Jean Aubin notes, 'Gujarat was not a good customer for this export *par excellence* of the Persian Gulf'. At the same time, however, Gujarat was Hormuz's major trading partner, which meant (to quote Aubin once again) that 'to cover her deficit, and to equilibrate her payments, Hormuz sent India large quantities of coin, essentially the silver lari'.[16] How large these flows from the Red Sea and Persian Gulf were, we cannot say with any degree of precision. In 1503, five ships sailing from the Red Sea to Gujarat were taken by Vicente Sodré, and they yielded 200,000 *pardaus* in specie; some two decades later, in 1521, a single ship from Hormuz to Cambay was found by the Portuguese to carry 20,000 *pardaus* in silver; finally, in 1524, D. Vasco da Gama captured still another vessel—this one on its way from Aden—carrying 60,000 *cruzados* worth of coined metal alone.[17]

TABLE 1

VENETIAN PRECIOUS METAL EXPORTS TO THE LEVANT (IN DUCATS)

Year	*Amount*
1423	500,000
1496	350,000
1497	360,000
1498	310,000
1500	200,000
1503	100,000

SOURCE: Note[18]

[15] Godinho, vol. I, pp. 228–2.

[16] Jean Aubin, 'Le Royaume d'Ormuz au début du XVIe siècle', *Mare Luso-Indicum*, vol. II, 1973, pp. 77–279, especially pp. 170, 175.

[17] Godinho, vol. I, p. 223.

[18] Ibid., p. 233.

We may compare these magnitudes with the information collected by Godinho from the Sanuto and Priuli diaries concerning Venetian exports to the Levant of minted and unminted silver and gold in roughly the same period.

It may be suggested on the basis of this evidence that the early sixteenth century sees a contraction in European transfers of precious metal to the Levant. One may then proceed to infer therefrom that precious metal transfers from west Asia to south Asia also shrank. Certainly, conventional wisdom agrees on a strong Portuguese impact during the first half of the sixteenth century, which is assumed to relax, however, as the century progresses. Using the work of F.C. Lane and V.M. Godinho, it is frequently argued that after 1560, precious metals were carried once again in increasing quantities by Venice to the Levant, and, thence, by caravan routes to the ports of the Red Sea, Basrah and Hormuz, from where—in turn—they reached south Asia.[19] This picture requires some modification however. For one, it is predicated on the assumption of a far more rapid growth in Euro-Asian trade in the sixteenth century than the recent historiography is willing to admit. Second, it probably assumes—at least implicitly—a far greater dependence of the Ottoman and Safavid monetary systems on Venice in the early sixteenth century than was the case; we have already seen how the Ottomans controlled eastern European mines, while at the same time the Ottoman rulers Selim (r. 1512–20), and Suleyman (r. 1520–66) are known to have used de-thesaurized Egyptian gold to strengthen the position of the *sultani*.[20] The bi-metallic system introduced in the 1470s by Mehmet had already had a significant impact by the time of his death in 1481; he left behind a treasure comprising 30 per cent gold coin and 70 per cent silver.[21] Between 1481 and the mid-sixteenth century, the *sultani* and the *efrenjiye*, both gold coins, grew in importance, sharing pride of place with the silver *akçe*. Contrary to what one might have expected had the west Asian economy been solely dependent on the Italian city states, no 'bullion famine' resulted in the early sixteenth century. Instead, gold continued to flow out of the Red Sea, as did silver from

[19] Cf. Frederic C. Lane, 'The Mediterranean Spice Trade: Its revival in the sixteenth century', in Lane, *Venice and History* (Baltimore, 1966).

[20] Sahillioglu, pp. 280–1; also see Jere L. Bacharach, 'Monetary movements in medieval Egypt', in Richards, ed., *Precious Metals*, pp. 159–81.

[21] Sahillioglu, p. 274.

the Persian Gulf; while these fed the Indian market, they did not starve the west Asian one.

Of the two flows, gold and silver, it appears very likely that gold dominated, although its flow was clearly far more oriented towards southern India than to the north. In the north, the Delhi Sultanate had established a silver and copper-based currency system, dominated by the silver *tanka* and *dehliwal*, supported by the copper *jital* and its fractions. Over time, however, the precious metal content of most coins in the Sultanate's heartland declined as billon coinage came to dominate. Simon Digby has noted recently that 'the monetary system initiated by the Muslim expansion in the early thirteenth century was in decay by the middle of the fourteenth century', and goes on to note too that 'in the whole of inland Muslim India, the fifteenth century is a period of reversion to mixed metal (billon) currencies, of copper with a scanty admixture of silver'.[22] Where silver currencies of a reasonably high quality did survive into the fifteenth and early sixteenth century were the maritime regions, notably Bengal (where silver *tanka* issues are testified to by numismatic evidence as well as early Portuguese sources).[23] To a lesser extent, the Sultanates of western India too continued to produce silver coins derivative of the *tanka*—the *muzaffaris* of the Malwa Sultans and the *mahmudis* of the Sultans of Gujarat.[24] Overall then, the 'bullion famine' of the fifteenth century was not total; it affected the heartland of north India far more than it did the coast; it also had less of an effect on regions such as Bengal, where trade to Burma ensured a more or less steady supply of silver. The Portuguese factor António Dinis wrote in August 1516 of the 'silver mine' in the kingdom of Pegu, which produced 'a great amount, the greater part of which is sent to Bengal and to the kingdom of the Calins (Coromandel) and some goes to Melaca'. The silver was taken

[22] Simon Digby, 'Northern India under the Sultanate: The currency system', in I. Habib and T. Raychaudhuri, eds., *The Cambridge Economic History of India*, vol. I (Cambridge, 1982), pp. 98–9.

[23] John Deyell, 'The China Connection: Problems of Silver Supply in Medieval Bengal', in Richards, ed., *Precious Metals*, pp. 207–30; Geneviève Bouchon and Luís Filipe Thomaz, *Voyage dans les Deltas du Gange et de l'Irraouaddy: Relation Portugaise Anonyme (1521)* (Paris, 1988); Sanjay Subrahmanyam, 'Notes on the Sixteenth Century Bengal Trade', *The Indian Economic and Social History Review (IESHR)*, 24, 3, 1987, pp. 268–70.

[24] António Nunez, 'O Livro dos pesos da Índia, e assy medidas e moedas', in R.J. de Lima Felner, ed., *Subsídios para a história da Índia Portuguesa* (Lisbon, 1868); for a discussion, also see Godinho, vol. I, pp. 263–8.

to Bengal from the Irrawaddy delta port of Cosmin every year in four or five ships, and took the form of silver rings ('prata feita em argolas que fazem no mesmo reino').[25]

Precious metal shortages continued in north India into the middle of the sixteenth century, and the principal coin in circulation even under Sher Shah Sur (r. 1540–45) was the billon *sikandari*. However, in this reign and the reign of Akbar (r. 1556–1605), the silver rupee rose to prominence, and a tri-metallic system (dominated for the most part it is true by silver and copper) came to be established.[26]

The contrast with southern India could not have been stronger in these centuries. In the fourteenth and fifteenth centuries, as silver shortages affected the economy of the Indo-Gangetic plain, the states of southern India as well as of the Deccan continued for the most part to adhere to a bimetallic system, where gold and copper dominated to the virtual exclusion of silver. The high value coin in this context was the *varaha* (also referred to as the *honnu* or *hun*, and later known to Europeans as the 'pagoda'). Together with its fractional coin, the *pratapa* (from which emerged the Indo-Portuguese *pardau*), the *varaha* dominated one end of the scale; at the other end are copper coins, in particular the *kasu* and the *nevel*.[27] In the middle of the spectrum were coins of a gold-copper mix, widely dispersed in terms both of their production and value, generically termed *panam* (from which the Portuguese *fanão*). Ranging from the relatively large *raja panam* of the Venad kingdom to the *chakram* of Madurai-Tirunelveli, and the smaller *panam* of the northern Tamil coast, these coins seem in fact to have dominated commercial transactions at a local level. On the other hand, the *varaha*—which weighed anything from 50.65 to 53 grains (with exceptional issues being still larger)—was strikingly close to the Venetian *zecchino* (52.4 grains) in size, and this facilitated the free circulation of the European coins in southern (especially south-western) India. In sum then, the southern Indian coinage system never

[25] Letter from António Dinis at Melaka to Francisco Pessoa and Tristão Silva, in Luís Filipe Thomaz, *De Malaca a Pegu: Viagens de un feitor português [1512–1515]* (Lisbon, 1966), pp. 187–92.

[26] Irfan Habib, 'Monetary System and Prices', in Habib and Raychaudhuri, eds., *Cambridge Economic History*, vol. I, pp. 360–1.

[27] Cf. R.S. Panchamukhi, 'The Coinage of the Vijayanagara Dynasties', in *Vijayanagara Sexcentenary Commemoration Volume* (Dharwar, 1936), pp. 101–7; P.M. Joshi, 'Coins current in the kingdom of Golconda', *Journal of the Numismatic Society of India*, 5, 1, 1943, pp. 85–95; for a mid-sixteenth century compendium on coinage, see Nunez, op. cit.

experienced a crisis like that in the north, in the main because of its dependence on gold, which was available from a variety of south-east Asian, as well as west Asian, sources. The flow of *zecchini* and Egyptian *sultanis* never ceased in the fifteenth century, from the Red Sea to southern India; at the same time, Burmese and south-east Asian gold (probably from Minangkabau) was also used to feed the Indian demand.[28] In the sixteenth century, the increased quantities of east African and east Asian production could only have helped matters along.

In the foregoing discussion, we have excluded from our purview the third of the major coinage metals, copper. This is no coincidence, for if information on gold and silver flows in the early sixteenth century is hard to come by, this is even more the case with copper. In 1513, Afonso de Albuquerque, writing to the Portuguese king, estimated the annual demand of Gujarat and its hinterland (in which he probably included much of the Indo-Gangetic plain) at 30,000 to 40,000 *quintais* (1,540 to 2,060 tonnes), his source of information on the occasion being the Gujarati Malik Gopi.[29] Further south too, major ports such as Bhatkal imported substantial quantities of copper; Duarte Barbosa writes *c.* 1518 of how in this Kanara coast port 'much copper is also used and taken inland for coinage, also for cooking pots and other vessels, used by the country people'.[30] The demand in the Malabar ports for copper was no less. Godinho shows how up to the mid-sixteenth century, the principal merchandize brought by the Portuguese on the *Carreira da Índia* from Lisbon was copper (at a rate of 4,000 *quintais* a year to 1510, and then at an average of 6,000 *quintais* in the following decade); this copper was sold, for the most part, in the Portuguese Malabar factories.[31] We can see that this could have accounted for no more than 20 per cent of south Asian demand, and it is therefore probable that the trade with west Asia served in large measure to plug this gap, as to an extent did trade with Melaka and parts eastward.

It is by now well established that a dramatic transformation occurs

[28] See Sanjay Subrahmanyam, 'The Coromandel-Malacca Trade in the 16th century: A study of its evolving structure', *Moyen Orient et Océan Indien*, t. III, 1986, pp. 55–80.

[29] Afonso de Albuquerque to D. Manuel, 4 December 1513, in R.A. de Bulhão Pato, ed., *Cartas de Afonso de Albuquerque*, vol. I (Lisbon, 1884), p. 240.

[30] *The Book of Duarte Barbosa*, ed., M.L. Dames, vol. I (London, 1918), p. 191.

[31] Godinho, vol. III, pp. 9–11.

in the nature of transcontinental flows of precious metals over the sixteenth century. Equally, it has long been recognized that the exploitation of mines in the New World (which produced perhaps 17 million tonnes of silver and some 280,000 tonnes of gold over the sixteenth century, in particular during its latter half) form a major part of the reason for this transformation, with the growth in Japanese exports of precious metal also performing a significant role.[32] For the most part, however, Japanese production does not seem to have reached west Asia, where imports came first from Europe and Africa, and later from the Americas; on the other hand, in south Asia, all these streams met and intermingled.[33]

In west Asia, the first significant impact of the changes in the world production profile is felt in the 1550s, with the appearance of the Spanish *real de a ocho*, termed *guruş* in the Ottoman empire. In 1570, these coins are officially recognized by the Ottomans and are allowed to circulate; within a few years, they swamp gold imports from Egypt into Anatolia, and there is also a significant flow which begins over the border into Iran.[34] Thus, besides the *akçe*, the *pare* (a silver coin introduced under Suleyman, and weighing 1.2 grams), and the *şahi* (originally a Persian coin, and used in external trade by the Ottomans), the *guruş* becomes a staple of west Asian economic life.[35] The *real* soon dominates circulation in the western Indian Ocean, as the exports from the Red Sea turn increasingly into silver rather than gold; however, the *lari* holds out to an extent in the face of competition from the *real* and *abbasi*, and the circulation of the former is remarked even as late as the 1650s by the French jeweller Jean-Baptiste Tavernier. In Tavernier's somewhat exaggerated language, between Baghdad and Ceylon, 'on ne parle que des larins'; elsewhere, he writes of the western Indian Ocean that 'tout le négoce se fait par larins'.[36] In fact, the *lari* was being steadily undermined, both by the Spanish coin and its European imitators, and by the coinage of the Safavid Shah 'Abbas.

[32] Ward Barrett, 'World Bullion Flows, 1450–1880', in James D. Tracy, ed., *The Rise of Merchant Empires: Long-distance Trade in the Early Modern World, 1350–1750* (Cambridge/New York, 1990), pp. 224–254.

[33] Om Prakash, *The Dutch East India Company and the Economy of Bengal, 1630–1720* (Princeton, 1985), pp. 11–22.

[34] Sahillioglu, pp. 281–6.

[35] Ibid.; also see Artur Attman, *The Bullion Flow Between Europe and the East, 1000–1750* (Goteborg, 1981), pp. 19–22, 101–3.

[36] Tavernier is cited in Godinho, vol. I, pp. 231–2.

The *real* invasion into the western Indian Ocean was two-pronged. On the one hand, there was the flow from Europe into west Asia, and from there to the ports of western India; on the other hand, one has the growing import by the Portuguese themselves on the *Carreira da Índia* (which frequently exceeded 180,000 to 200,000 *cruzados* worth in the 1580s).[37] One may also speak of a third flow, in the form of the Acapulco-Manila trade, though not much of this silver actually reached the western Indian ocean. Which of these flows was more important though from the point of view of the south Asian economy—west Asia, or the Cape route? In the late sixteenth century, there are indications that it was still the former. In the 1570s, for example, the Portuguese chronicler Diogo do Couto estimated trade between Gujarat and the Red Sea at twelve to fifteen ships a year; from this and related figures, M.N. Pearson has calculated that imports from the Red Sea Gujarat in the period probably totalled Rs 10 million.[38] Whatever the magnitude of the total import bill, a large proportion of it is certain to have been gold and silver; Couto again testifies that in 1582, one Mughal ship from the Red Sea to Surat alone carried precious metal on board worth Rs 1.2 million.[39] If one adds to this the quite considerable trade between the Red Sea and other south Asian ports (such as Dabhol, Cannanore, and after 1590 Masulipatnam), we have a flow of silver which easily dwarfs that brought on the *Carreira da Índia*.

As a statement, this should scarcely seem surprising in the light of the now orthodox view (of Steensgaard etc.) which suggests that the *Carreira da Índia* counted for very little in fact. But there is a corollary to this view which is more disturbing: here I refer to the notion that after 1600 (or more precisely, 1622) the balance between the Cape route and the Levant route did shift in favour of the former. In his arguments to this effect, Steensgaard concentrates in point of fact of Asian pepper and spice deliveries to Europe, where his arguments certainly have some validity; but there is equally a flip side to this proposition, and precious metal flows from the west to Asia are often assumed, by implication, to have come largely via the Cape route after 1600.[40]

[37] Ibid., vol. II, p. 113.

[38] Diogo do Couto, *Da Ásia*, Década Nona, reprint (Lisbon, 1975), pp. 85–6; also see Michael N. Pearson, *Merchants and Rulers in Gujarat: The Response to the Portuguese in the Sixteenth Century* (Berkeley, 1976), pp. 100–1.

[39] Pearson, ibid., citing Couto, *Ásia*, Década Décima, p. 5.

[40] Niels Steensgaard, *Carracks, Caravans and Companies: The Structural*

The conventional wisdom on the question has recently been summarized by Ward Barrett, and his estimates are as appear in Table 2.

TABLE 2

EXPORTS OF SILVER AND SILVER EQUIVALENT FROM EUROPE
(ANNUAL AVERAGE, IN TONNES)

Period	*Levant*	*Cape Route*	*Other*
1601–25	50	8	43
1626–50	50	19	56
1651–75	50	20	59
1676–1700	50	53	53
1701–25	50	85	53
1725–50	50	101	59

SOURCE: Note[41]

Now, of course all exports from Europe to the Levant would not have reached South and East Asia; indeed only a middling proportion can be thought to have escaped the west Asian economic system if the Cape route can be thought to have dominated after 1620. Further, as eastern European production declined in the seventeenth century, exports from Europe to west Asia must have exceeded exports from west Asia to south Asia, unless silver and gold stocks in west Asia were actually being depleted (a rather unlikely event). Indian historians have traditionally been sceptical of the notion that flows of precious metal from west Asia to south Asia declined in absolute terms as a result of Company activity on the Cape route in the seventeenth century. This scepticism has recently been reiterated in varying degrees and forms by Joseph Brennig, Shireen Moosvi and H.W. van Santen. Brennig has argued that 'despite the expansion of Company trade between India and Europe, silver continued to move through West Asia's traditional (*sic*) trade, the caravan routes of Ottoman Egypt and Arabia, and the sea lanes of the Red Sea and Persian Gulf',

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Crisis in the European-Asian Trade in the Early 17th Century (Copenhagen, 1973).

[41] Barrett, p. 251, Table 7.7. Figures for trade on the Cape route are taken by him from F.S. Gaastra and K.N. Chaudhuri, and hence only include Dutch and English Company trade.

and Moosvi concurs, suggesting moreover that the overland routes which linked the Indo-Gangetic plain to west Asia via Kabul and Kandahar also continued to play a major (if non-quantifiable) role.[42]

TABLE 3

PRECIOUS METAL IMPORTS INTO SURAT FROM WEST ASIA, CARRIED ON INDIAN SHIPS (MILLION RUPEES)

Year	*Red Sea*	*Persian Gulf*
1622	2.9	?
1638	0.5	?
1641	3.5	?
1643	0.7	?
1644	1.3	?
1645	0.8	0.2
1646	1.1	0.2
1647	1.6	0.2
1649	1.8/2.4	?
1651	0.8	?
1653	2.0	?
1654	1.8/2.1	1.1
1657	?	2.0/2.5
1679	5.0	?
1685	5.0	?
1708	6.2	?
1710	6.0	?

SOURCE: Note[43]

[42] J.J. Brennig, 'Silver in Seventeenth-Century Surat: Monetary Circulation and the Price Revolution in Mughal India', in J.F. Richards, ed., *Precious Metals*, pp. 477–96, especially p. 493. Also see Shireen Moosvi, 'The silver influx, money supply, prices and revenue-extraction in Mughal India', *Journal of the Economic and Social History of the Orient*, 30, 1, 1987; pp. 47–94, especially pp. 55–74

[43] H.W. van Santen, *De Verenigde Oost-Indische Compagnie in Gujarat en Hindustan, 1620–1660*, Ph.D. dissertation, Leiden University, 1982, p. 76.

Alternative, more exact, estimates are available for some of these years. These are as follows (in rupees)..

Hans van Santen takes the argument a step further in his 1982 Leiden doctoral dissertation, where he attempts to quantify one part of the precious metal trade between west and south Asia. Van Santen's estimates are now being subjected to rigorous and critical scrutiny, but until revised estimates are published, his figures (Table 3) remain the most reliable to date.

How do these figures compare with those for the sixteenth century? If we accept Pearson's estimate of Rs 10 million worth of imports arriving each year from the Red Sea to Gujarat in the 1570s, there seems to be a contraction. However, the figures cited in the table above are probably underestimates for several reasons. First, the Companies too brought gold and silver into Surat from Mokha and Bandar 'Abbas, both on their own account and as freight; this trade is likely to have been particularly significant in the case of the Persian Gulf, for the Dutch Director at Surat, Arent Barentse noted in 1645 that the total gold and silver flows on this route alone were worth over 2 million rupees.[44] To an extent, the adjustments one would have to make would vitiate van Santen's conclusion that bullion flows into Surat from west Asia grew in the second half of the seventeenth century, in comparison to the first half. Certainly his pre-1650 range of Rs 2 to 4 million rupees may appear to be on the low side (as V.B. Gupta has recently demonstrated).[45]

Still, converted into silver by weight, van Santen's figures yield interesting conclusions. His suggestion of a pre-1650 range of 2 to 4 million rupees worth of gold and silver imports translates to a silver and silver equivalent figure from 25.6 to 51.2 tonnes, which clearly

Year	*Red Sea*	*Persian Gulf*
1643	614,543	19,906
1645	751,942	241,799
1647	637,996	214,110
1651	822,322	575,904
1654	1,931,620	1,173,300

For the references in the Dutch archives to these quantities, see Om Prakash, 'Some Aspects of Trade in Mughal India', *Presidential Address to the Indian History Congress*, Medieval Section, 42nd Session (Bodh Gaya, 1981), p. 11.

[44] Barentse is cited in van Santen, p. 75.

[45] V.B. Gupta, 'Imports of treasure and Surat's trade in the seventeenth century: A note', in E. van Cauwenberghe, ed., *Money, coins and commerce* (Leuven, 1991).

outstrips the silver and silver equivalent brought on the Cape route from 1600 to 1675.[46] The post-1650 values of 3 to 6 million rupees yield an average of 57.6 tonnes, which still slightly exceeds bullion transported on the Cape route by the Dutch and English in the quarter century, 1676–1700. The conclusion is inescapable: trade from the Red Sea and Persian Gulf clearly dominated the Cape route as a source of gold and silver supply to south Asia until the early eighteenth century. Indeed, one can make this point quite emphatically, since the estimates put forward by van Santen are lower limits: Surat was only one of the ports importing gold and silver from the Red Sea and Persian Gulf (albeit the most important one). The ports of Malabar and Kanara continued to trade with west Asia in the seventeenth century, as did first Masulipatnam and later Madras on the Indian east coast.[47] While chests of *reales* were brought by English Company and private ships into post-1650 Madras, Masulipatnam had enjoyed direct maritime links with the Red Sea, Bandar 'Abbas and Basrah upto the 1660s. A single Masulipatnam vessel captured by the Portuguese off Colombo in 1640, while on its return from the Red Sea, is said to have contained over 1,200,000 *patacas*, including 'several open and closed chests filled with minted gold and patacas' (*'hũas canastras abertas e outras fechadas com ouro amoedado e patacas'*).[48] Again, in the second half of the seventeenth century, Om Prakash notes the existence of a relatively minor, but still not insignificant, direct maritime link between Hughli in Bengal and the Red Sea and Persian Gulf, which contributed to the inflow of specie in particular silver) into the former area.[49]

Between 1700 and 1750, it is possible that the annual flow of precious metals between west and south Asia diminished somewhat. Our conclusions on this question must remain speculative however, for they depend on the importance with which we are willing to invest the evidence on the decline of shipping in ports such as Surat, earlier

[46] This is on the assumption that the Mughal rupee contained 12.8 grams silver, since the *real de a ocho* contained 26.8 grams and was worth 2.1 rupees.

[47] For a discussion of the period upto 1650, see Sanjay Subrahmanyam, *The Political Economy of Commerce: Southern India, 1500–1650* (Cambridge, 1990), ch. 4; for later trade, see the material discussed in *Idem.*, 'Persians, Pilgrims and Portuguese: The Travails of Masulipatnam Shipping in the Western Indian Ocean, 1590–1665', *Modern Asian Studies*, 22, 3, 1988, pp. 503–30.

[48] *Arquivo Histórico Ultramarino*, Lisbon, Caixas da India, no. 20[344], doc. 131, Book I, f. 6.

[49] Om Prakash, *The Dutch East India Company and Bengal*, pp. 27–8.

a major point of entry for precious metals. According to Ashin Das Gupta, Surat's trade—which had in about 1700 exceeded 16 million rupees—was reduced by 1746 to about 4.5 million rupees; presumably, bullion imports would have fallen substantially too. This is testified to equally by the decline of shipping between west Asia and Surat, as the table below indicates.

TABLE 4

SHIPPING FROM WEST ASIA TO SURAT (ANNUAL AVERAGE)

Period	*Total Surat Shipping*	*Red Sea*	*Persia/Maskat*
1714–20	39	10	8
1721–30	50	9	6.7
1732–41	33	7	2.7

SOURCE: Note[50]

In the same period, it has been argued by S. Arasaratnam that direct trade in the hands of Asians between the Indian east coast and west Asia had also more or less ground to a halt, although it appears likely that English private traders continued to maintain links between Calcutta and Madras (the two major centres of their activity) and the Red Sea and Persian Gulf.[51] Taking one thing with another therefore, impressionistic evidence confirms the notion that precious metal flows between west and south Asia were declining in the period; a firm conclusion awaits better evidence.

To sum up this section, the evolution of precious metal flows between west and south Asia over the two and a half centuries after the discovery of the Cape route was a complex affair. Long before American gold and silver first entered the areas of Ottoman and Safavid dominance, precious metals had flowed from the Red Sea and Persian Gulf to south Asia, though these flows were insufficient to ward off the bullion famine from which north India suffered in the fifteenth and early sixteenth centuries. From the 1550s, the first *reales de a ocho* enter the Ottoman realm, and they are followed by first

[50] Derived from Ashin Das Gupta, *Indian Merchants and the Decline of Surat, c. 1700 to 1750* (Wiesbaden, 1979), pp. 290–2.

[51] S. Arasaratnam, *Merchants, Companies and Commerce on the Coromandel Coast, 1650–1740* (Delhi, 1986), pp. 204–6; but also see Holden Furber, *John Company at Work* (London, 1948), on English private trade.

Dutch, and then French and other western European issues. These coins do not always remain in the Ottoman realm, but flow into the area of Safavid dominance, where the Shahs of Persia insist on their being re-minted in the form of '*abbasis*. At Basrah, however, it continued to be possible to obtain *reales*, as also *laris*. In turn, Basrah, Bandar Abbas and other minor ports (such as Jask) export a part of the silver inflow into Persia to south Asia; and another flow is directly from the regions of Ottoman dominance to the Indian peninsula. A significant aspect of the post-1560s period in the case of outflows from the Red Sea to south Asia is the shift in balance between silver and gold; if in about 1500, gold had dominated, this was no longer the case in the latter part of the century. The west Asia-south Asia link is not appreciably weakened in the seventeenth century, and may even have gained in strength. Certainly, it dominates precious metal flows into Asia by the Cape route by a significant margin for the greater part of the century. In view of the extent of this flow, it becomes necessary for us to rethink Attman's estimates of silver and gold flows from Europe to the Levant over the seventeenth century.[52]

After about 1700—and more particularly from the 1720s—the transfer of precious metal from west Asia to south Asia is checked somewhat, and it is probable that now, at last, the Cape route comes to dominate supplies of gold and silver to south Asia. It is possible to relate this to changes in the 'monetary policy' of the Ottomans, which becomes more aggressively bullionist towards the close of the seventeenth century.[53] At the same time, there is as at least some suspicion that after 1730, precious metal imports into the Ottoman empire from Europe were on the wane. To the extent that west Asia continued to export silver to south Asia in the half century 1700–1750, it is likely to have come more and more from the Anatolian mines of Gumuşhane, Keban, Ergani and Espiye, where production in the 1730s and 1740s fluctuated between 12 and 40 tonnes of silver.[54]

The Price Revolution Revisited

So much then for flows of gold and silver. What of its impact, whether

[52] Attmann's estimate, as cited by Barrett (note 32 *supra*) is of a fixed annual flow of 50 tonnes from 1601–1780.

[53] Sahillioglu, pp. 288–92.

[54] Ibid., p. 291.

measured through prices (our principal focus in this section), or through other qualitative indices? To a sixteenth century Venetian observer cited by Braudel, gold and silver were 'the sinews of all government, it gives its pulse, its movement, its mind, soul and it is its essence and its very life . . . It overcomes all impossibilities, for it is the master, the patron of all; it carries with it the necessity of all things; without it all is weak and without movement'.[55] Braudel himself sees gold and silver as 'vital to the movement of the most vital sector of the Indian . . . economy', and cites with approval 'the research of Aziza Hasan, (which shows) that the European inflation of the sixteenth century was echoed, with about twenty years time lag, in India'. Nor was India alone in this: 'Ottoman prices (writes Braudel) followed the European pattern for the same reasons', and cites in this instance the work of Ömer Lütfi Barkan, concerning inflation at Bursa between about 1590 and 1695.[56]

Braudel's scholarship is, alas, not quite impeccable in the instance. The graph he produces for prices at Bursa shows them measures in *akçes* (aspers), and he blandly notes that 'these nominal prices do not allow for the devaluation of the asper'. Similarly, Hasan's work on India had come under rather sharp criticism considerably before the publication of *Le Temps du Monde* (1979).[57] I shall begin therefore by reviewing briefly the price evidence in first the south Asian, and then the west Asian case, and will then turn to the wider implications of this question.

For most of India, price evidence in any continuous form does not exist prior to the seventeenth century. In the seventeenth century, however, it is possible to reconstruct prices, usually from European factory records, for several urban centres in the subcontinent. The picture appears as follows.

[55] Braudel, *Mediterranean*, vol. I, p. 491.

[56] Fernand Braudel, *The Perspective of the World* (Fr. *Le Temps du Monde*), tr. Siân Reynolds (London, 1984), p. 76. For the European evidence, see the recent survey by Douglas Fisher, 'The price revolution: A monetary interpretation', *The Journal of Economic History*, 49, 4, 1989, pp. 883–902.

[57] Braudel, *Perspective*, p. 474. For criticisms of Hasan's work, see Om Prakash and J. Krishnamurty, 'Mughal silver currency: A critique', *IESHR*, 7, 2, 1970, pp. 139–50; also—though less damaging and less germane to the price issue—John Deyell, 'Numismatic Methodology in the estimation of Mughal currency output', *IESHR*, 13, 3, 1976, pp. 393–401. The original article by Hasan, 'The silver currency output of the Mughal empire and prices in India during the 16th and 17th centuries', appeared in *IESHR*, 6, 1, 1969.

Bengal

Here, Om Prakash reconstructs, on the basis of Dutch invoices, price trends for the period 1657 to 1714. His information pertains to four commodities, namely rice, wheat, sugar and clarified butter. His conclusion is that prices fluctuate considerably, but that no statistically significant trend, either upward or downward, emerges. On the other hand, the prices of certain export goods such as some textile varieties and raw silk do register an increase over the same period. Om Prakash's evidence on both agricultural prices and inter-sectoral terms of trade is of a piece with K.N. Chaudhuri's evidence of Bengal (based on English Company materials). He too suggests a general stability in the price of rice (save for a brief phase in the mid-eighteenth century), as well as an increase in the prices of some varieties of exported textiles.[58] It is of some significance that an unpublished Ph.D. thesis by S.M.A. Hussain does show an increase in the prices of rice, mustard oil and clarified butter in Bengal; but this is between 1750 and 1800, when bullion had begun to flow *out* of the region![59]

Surat

In the case of Surat, H.W. van Santen provides us data on rice, wheat, clarified butter, jowar, jaggery and sugar prices for much of the seventeenth century.[60] His conclusions are that between 1610 and 1660 at least, no inflationary trend is visible in the rupee prices of these commodities. Hence, inflation—if at all it existed—must have been either before 1610 or after 1660, periods for which the data on Surat is too poor to yield a conclusion.

[58] Om Prakash, *The Dutch East India Company and Bengal*, pp. 248–56; K.N. Chaudhuri, *The Trading World of Asia and the English East India Company, 1660–1760* (Cambridge, 1978).

[59] Cf. A.S.M. Akhtar Hussain, *A Quantitative Study of Price Movements in Bengal during the 18th and 19th Centuries*, Ph.D. thesis, University of London, 1978; the eighteenth century data on key commodities is also summarized in Hameeda Hossain, *The Company Weavers of Bengal: The East India Company and the Organization of Textile Production in Bengal, 1750–1813* (Delhi, 1988), pp. 179–83.

[60] Van Santen, pp. 92–7.

Masulipatnam

My own earlier work on the south–eastern Indian port-city of Masulipatnam is also of relevance in this context. In Masulipatnam, unlike in Surat or Bengal, currencies in use were predominantly of gold and copper (the *hun*, the *panam*, and the *nevel*). Dutch records from the first half of the seventeenth century cover the prices of at least a dozen imported commodities, besides several varieties of textiles, and rice. Where textiles are concerned, two major varieties show a slight upward trend in price, another no trend at all, and at least one category (red *beatilhas* of 24 *hasta*) a slight decline.[61] The same absence of trend is remarked in the case of two other export goods, indigo and steel.

Of greater interest perhaps is the price of rice. Here, short-term fluctuations are fairly violent (as in Bengal), but no upward trend is available for the period 1620 to 1650; besides, the average prices are remarkably similar to those computed for the same region in the period 1660–85 by Joseph Brennig.[62] All these prices are computed in terms of the gold *hun*; we should note, however, that a substantial increase takes place in Masulipatnam in the value of gold relative to silver in the first half of the seventeenth century. There are three major phases of appreciation, the first around 1620, the second late in the 1620s, and the third in the 1640s (the last countervailing and overwhelming the post-1636 appreciation of silver in Golconda, which was a result of the striking of silver rupees as a tribute to the Mughals). By the

[61] Red *beatilha* prices are as follows, in *pagodas*:
1607 : 1.81
1608 : 1.85
1612 : 1.76
1627 : 2.19
1634 : 1.66
1636 : 1.64
1637 : 1.68
1639 : 1.39
1641 : 1.56
1642 : 1.37
The source for these prices is the Dutch Overgekomen Brieven en Papieren Series of the VOC, in the *Algemeen Rijksarchief*, The Hague.

[62] Joseph J. Brennig, *The Textile Trade of 17th Century Northern Coromandel: A Study of a pre-Modern Asian Export Industry*, Ph.D. dissertation (Madison: University of Wisconsin, 1975), pp. 206–9.

late 1640s, the gold/silver ratio at Masulipatnam is as high as 17.2 to 17.5, as compared with 14.2/14.3 at Surat.

Two further remarks are in order in respect of prices in south-eastern India. First, an argument has been advanced of late for a general inflation here too in the seventeenth and early eighteenth centuries by S. Arasaratnam; however his evidence is so sketchy and confusedly organized as to render it well-nigh unusable.[63] In contrast, a relatively well-organized price series for Pondicherry in the first half of the eighteenth century shows no trend in rice prices.[64] Second, there is one exception to the Masulipatnam rule of no inflation; this is the case of raw cotton, the price of which increases in one sharp burst between 1671 and 1680, and remains sticky.[65] However, this appears to have more to do with the demand and supply of this particular commodity than the general trend of prices in the region.

Agra

It is mainly on evidence from Agra that partisans of an Indian 'Price Revolution' rest their case. For instance, Irfan Habib argues:

> Some broad secular trends [existed] in the general movement of prices. One great rise appears to have come largely between 1610 and the mid-1630s, with the price level raised to between one-and-a-half and twice what it was in 1595 . . . The early 1660s registered another peak, after a slight decline . . . [Thereafter] on the whole, some stability in the general price level was maintained until about 1710 [followed by] . . . a great rise in agricultural prices during the second decade of the eighteenth century, resulting, even after the following inevitable decline, in a level which stood throughout the remaining part of the eighteenth century at about double that prevailing around 1700.[66]

Habib's hypothesis is that these movements in prices can be directly related to currency in circulation: thus, 'It may well be that the stability

63 Arasaratnam, pp. 335–7.

64 Tsukasa Mizushima, *Nattar and the Socio-Economic Change in 18th–19th Century Tamilnadu*, Tokyo, 1986.

65 Cf. J.J. Brennig, 'Textile producers and production in late 17th century Coromandel', *IESHR*, 23, 4, 1986, p. 339.

66 Irfan Habib, 'Monetary System', pp. 375–6; also see *Idem.*, 'A System of Trimetallism in the Age of the "Price Revolution": Effects of the Silver Influx on the Mughal Monetary System', in J.F. Richards, ed., *The Imperial Monetary System*, pp. 137–60, especially pp. 159–60.

of prices between *c.* 1665 and *c.* 1710 is connected with the decline in currency supply and the subsequent rise in the years following 1710 is partly the cumulative effect of the increasing currency supply'.[67] If at times he argues using some form of Fisher's Quantity Theory, at other times he introduces caveats concerning output growth and monetization which seem more apposite were he using an output (rather than a transactions) formulation.[68]

This theoretical naiveté aside, there is the question of evidence. The use of copper and gold prices, measured in silver terms, yields Habib his desired 'Price Revolution', when suitable adjustments are made to ensure that prices double between 1600 and 1660. But why resort to such improbable proxies when commodity prices do exist? For Agra, Habib and others have found only three sets of prices over the span 1595 to 1670: namely 1595, 1638–39 and 1670. The first of these is derived from a normative manual on administration, which is part of a larger apologia for the Mughal emperor Akbar; it hence probably reflects a sort of 'court price.'[69] Even if it were admitted, three price quotations over seventy-five years do not make for a 'Price Revolution'. This is all the more so because we have seen how violently prices could fluctuate in the short-run.

Other Evidence

Evidence from other parts of India also exists. Some of this, in particular a run for the first half of the eighteenth century, has been reproduced by S.P. Gupta for Rajasthan; once again violent fluctuations exist, but no trend. Yet on this basis a price-index has been derived, using as weights the amount of different crops handed in as revenue-payment in various years: this yields an inflationary trend all right, but the weighting system seems wholly arbitrary. The price-index appears in part as follows:

[67] Habib, 'Monetary System', p. 376. Contrast this to the caveats and qualifications put forward on pp. 365–6, only to be rapidly abandoned!

[68] Ibid., pp. 365–6; for a critique of historians using Fisher's Quantity Theory, see Dennis O. Flynn, 'Use and Misuse of the Quantity Theory of Money in Early Modern Historiography', in E. van Cauwenberghe and F. Irsigler, eds., *Minting, Monetary Circulation and Exchange Rates* (Trier, 1984), pp. 383–417.

[69] This data was presented in Irfan Habib, *The Agrarian System of Mughal India (1556–1707)* (Bombay, 1963), p. 83, and has been reproduced innumerable times by adherents of the 'price revolution'.

TABLE 5

'PRICE INDEX' FOR EASTERN RAJASTHAN, 1665–1750

1665	34.93	1706–15	92.06
1669	38.11	1727–28	59.32
1677	60.57	1739–40	73.01
1684–93	45.03	1749–50	103.02

SOURCE: Note,[70] Gupta and Moosvi.

Finally, T.R. De Souza graphs prices of two qualities of rice and one of wheat in the Portuguese enclave at Goa from 1600 to 1700, and concludes that prices may have risen after about 1650.[71]

Overall then, the Indian evidence suggests that price inflation was at best sporadic, and limited to specific regions and specific commodities—and one can tentatively see it as more tenable for wheat and ragi (and that too in the late seventeenth century), rather than for rice. To explain why such might have been the case, we must enter the question of the demand for monetary media in the economy; but before doing so, we may briefly review the price evidence in the west Asian literature.

In the case of the regions which fell under the control of the Ottoman and Safavid states, evidence turns out to be even more scanty than on India—at least in the secondary literature. The major and most frequently cited work is that of Ömer Lütfi Barkan, published in the 1970s.[72] Barkan's hypothesis is of a 'Price Revolution' in the west Asian context, and parallels that of Habib in many ways, save for its timing. His data set can be divided into two parts: (*a*) the prices of seventeen commodities at Bursa, measured in *akçes*, for 1489–90, 1585–86, and 1604–05 (note the similarity to the Agra evidence!), and (*b*) a table which summarizes the 'foodstuff and kitchen expenses'

[70] S.P. Gupta, *The Agrarian System of Eastern Rajasthan (c. 1650 to c. 1750)* (Delhi, 1986), pp. 76–82; contrast this to the weighted 'price-index' in S.P. Gupta and Shireen Moosvi, 'Weighted Price and Revenue-Indices of Eastern Rajasthan (*c.* 1665–1750)', *IESHR*, 12, 2, 1975.

[71] T.R. De Souza, *Medieval Goa: A Socio-Economic History* (New Delhi, 1979), p. 172.

[72] Cf. note 56 *supra*. Barkan's study is 'The Price Revolution of the Sixteenth Century: A Turning Point in the Economic History of the Near East', *International Journal of Middle East Studies*, 6, 1975, pp. 3–28.

of the Sulemaniye Imaret at Istanbul, with twenty-four observations over the period 1490 to 1656. Considering the first of these, the price in *akçes* of wheat and rice (per *kile*) appear as in Table 6.

TABLE 6

PRICES OF RICE AND WHEAT AT BURSA (PER KILE)

	1489–90	*1585–60*	*1604–05*
Wheat	3.50	23.38	71.71
Rice	16.93	33.00	60.00

SOURCE: Note[73]

On this basis, Barkan concludes that there was a considerable inflation in the price of basic necessities, although one may wonder whether three observations over a hundred and fifteen years constitute a series. We are hence obliged to turn to Barkan's evidence for the expenditures of the Sulemaniye Imaret, as a proxy for prices. Here the index of expenditures in *akçes* rises from 100 in 1490 to 268.20 in 1586–87, climbs steeply to a peak of 630.66 in 1605–06, and then declines to between 460 and 470 in the 1640s. This table apparently forms the basis for some recent assertions in the literature that grain prices in the Ottoman empire rose by over 500 per cent in the course of the sixteenth century, but there is one major problem with using the *akçe* values. The *akçe* was devalued several times in the period, its silver content falling from 0.768 grams in the 1480s to 0.731 grams in the period 1491–1561, to 0.384 grams in 1584–86, to 0.323 grams in the early seventeenth century, and then to 0.307 grams after 1618.[74] If we take this into account, the 'price index' is much altered.

TABLE 7

INDEX OF EXPENDITURE OF THE SULEMANIYE IMARET

Year	*Index*	*Year*	*Index*
1490	100.0	1585–86	162.10
1555–56	135.41	1586–87	134.10
1573	195.82	1587–88	159.25

[73] Ibid., pp. 10–11.

[74] For devaluations of the *akçe*, see Sahillioglu, p. 303.

Year	*Index*	*Year*	*Index*
1588–89	182.76	1623–25	249.57
1595–96	220.80	1628–29	170.70
1596–97	266.20	1629	168.61
1599–60	209.10	1632–33	201.00
1600–01	193.55	1634	191.57
1601	202.80	1635–36	193.45
1602–03	198.85	1636–37	191.78
1605	259.00	1648–49	187.31
1605–06	265.24	1655–56	184.02

SOURCE: Note[75]

Thus, if we accept Barkan's contention that the Imaret's expenditure data approximates a price-index in the sense of being a fixed bundle of goods (though his reasons for assuming this are not clear), we are left with a doubling of prices over a century, followed by a minor deflation. To portray this as a 'Price Revolution' seems to me to be overstating the case, as indeed to see this as the cause of a sort of 'Imperial Crisis'. And, to give him credit, Barkan is cautious in his analysis of the causes of the rise in prices. As summarized more recently by Halil Inalcik, his hypothesis is that 'the rise in prices cannot be solely explained by the general inflation in silver, but must be attributed basically to the population pressure in the Empire and the mercantile pressure of Europe on the one hand, and to the Ottoman devaluations of the *akça* on the other'.[76] Thus, Barkan evidently wished to distance himself somewhat from the quantity theorists, and hedge his bets between inflation as a demand-based phenomenon (thus, the Ottoman empire 'was undergoing population growth too

[75] Barkan, p. 11; 'Table, by dates, of the foodstuff and kitchen expenses, taking as a base the ratio of goods and amounts found in the balance sheet of the Sulemaniye Imaret for 1585–86 and applying these to the prices listed for other dates'. Scepticism concerning Barkan's inflation hypothesis is also expressed in Haim Gerber, 'The monetary system of the Ottoman Empire', *Journal of the Economic and Social History of the Orient*, 25, 3, 1982, pp. 308–24. For more recent price data from one Ottoman city, see Amnon Cohen, *Economic Life in Ottoman Jerusalem* (Cambridge, 1989), pp. 131–51.

[76] Halil Inalcik, 'Impact of the *Annales* School on Ottoman Studies and New Findings', *Review*, 1, 3/4, 1978, pp. 69–96, especially p. 91.

heavy for its means of subsistence'), and one caused by an increased supply of silver.

The implicit Malthusianism of the first part of this argument is taken a step further in a recent article by Jack Goldstone. For Goldstone, Ottoman inflation is part of 'a worldwide crisis of agrarian absolutist states' in the period, all stemming from 'the pressure on resources (which) led to insistent inflation of prices'. This is combined by Goldstone with a curious version of Fisher's Quantity Theory, wherein the villain is not money supply but 'velocity of money circulation'. His conclusion is worth quoting at some length, particularly for its explicit Malthusianism (for here it is more the shadow of Ladurie that looms than that of Braudel).

> In short, between 1500 and 1700 price movements across Eurasia corresponded closely to the balance between population and food supply. In the sixteenth and early seventeenth centuries, population growth, accompanied by increasing urbanisation and velocity of money circulation, pressed on limited food supplies and led to steadily rising prices.[77]

This model is made to fit Stuart England, Ottoman Turkey and Ming China; for some reason, Safavid Iran and Mughal India (two other 'agrarian absolutist states' in the terms of Perry Anderson) escape Goldstone's attention. Having established the population-resource imbalance to his own satisfaction, Goldstone goes on to conclude that since the tax revenues of states were fixed in cash, state treasuries entered a crisis. When they attempted to expand taxation (which is to say maintain it in real terms), resistance ensued in the countryside. Equally, population growth led to an expansion in the urban elite, and hence in their competition for plum positions. Thus, once the Malthusian logic takes over, government finances, elite social mobility, and even popular uprisings and religious reform all come out in the wash. The resemblance to *Les Paysans du Languedoc* is more than passing.[78]

On occasion, other historians have made arguments not dissimilar to that of Goldstone for the seventeenth century Ottoman empire. One

[77] Jack A. Goldstone, 'East and West in the Seventeenth Century: Political Crises in Stuart England, Ottoman Turkey and Ming China', *Comparative Studies in Society and History*, 30, 1, 1988, pp. 108–42, especially p. 109.

[78] Ironically, however, Le Roy Ladurie's work does not figure in Goldstone's bibliography, nor indeed does the entire Brenner debate (of obvious relevance to his thesis).

well-known argument (redolent of the Brenner debate) is that there is a process of Ottoman 'refeudalization' which results from a demographic crisis/price revolution; here, great stress is laid on the rise of the *çiftlik*, a substantial 'estate' which was used in the Balkans, Thrace and western Anatolia to produce wheat, maize, cotton and tobacco.[79] *Çiftliks* were not held as private property however; rather, they were held together by a combination of fiscal, propreitorial and credit relations between peasant producers and magnates. Some writers directly link the emergence of the new system to the breakdown of the older *timar* system, which was a form of prebend used to support cavalry forces maintained by the prebend-holder. In this case, a 'military revolution' hypothesis can be employed as well; if cavalry produces the *timar*, firearms produce the *çiftlik*![80]

It begins to appear then that the classic historiographical constructs in the west Asian and south Asian case bear some interesting resemblances to each other, but also differ in content and emphasis, on the question of precious metal flows and the price revolution, and their relationship to various early modern 'crisis'. In the case of the Mughal empire, one recent construct by Shireen Moosvi—only the latest in a long line of such—posits an agrarian crisis in the period 1658 to 1670, which while in part due to administrative failures, the fallout of dynastic succession, and purely fortuitous rebellions, is also portrayed as a consequence of 'the inflationary effect of the influx of silver into the country'.[81] Combined with this inflation, or even given pride of place in many formulations, is revenue-farming, *ijara* in the Mughal case, *iltizam* in that of the Ottomans. In the latter case, Suraiya Faroqhi has characterized the revenue-farming based explanation as

[79] Cf. Bruce McGowan, *Economic Life in Ottoman Europe: Taxation, Trade and the Struggle for Land, 1600–1800* (Cambridge/Paris, 1981); Halil Inalcik, 'The emergence of big farms, *çiftliks*: state, landlord and tenants', in *Contributions à l'histoire économique et sociale de l'empire ottoman*, Louvain, Collection Turcica No. 3, 1984, pp. 105–26.

[80] Inalcik, pp. 90–6; also see Geoffrey Parker, *The Military Revolution: Military Innovation and the Rise of the West, 1500–1800* (Cambridge, 1988), pp. 125–7, passim, and Suraiya Faroqhi, 'Political tensions in the Anatolian countryside around 1600: An attempt at interpretation', *Middle Eastern Technical University*, Economic Research Centre, Working Paper No. 30.

[81] Shireen Moosvi, 'Scarcities, Prices and Exploitation: The Agrarian Crisis, 1658–1670', *Studies in History*, (N.S.), 2, 1985, pp. 45–55; contrast this to the rather more cautious views on prices expressed by Moosvi in her paper cited in note 42.

a 'political explanation for the crisis of the mid-century'; its key proposition is that 'the tax farmers and financial agents of provincial governors with their frequent and unforseeable demands for high taxes, should have placed intolerable strains upon the peasant economies of the time'.[82] Though made with the Ottoman system in mind, this statement could well have been excepted from any one of a number of discussions of the so-called *jagirdari-ijaradari* crisis of the Mughal empire.

But even as a revisionist historiography has emerged in the Indian case, challenging the notion that a widespread crisis of peasant agriculture (indeed its very 'subversion') occurred in the early eighteenth century, and was followed by a century of gloom and darkness, the post-1600 Ottoman decline thesis too is coming to be challenged.[83] It is possible that specific sectors of the economy, such as the silk industry at Bursa or the woollen cloth manufacture at Salonica, Safed, Pleven and Trikkala underwent decline in the aftermath of the 'crisis', but this is far from generalizable. On the contrary, complex developments followed on the *celali* uprisings, which rocked early seventeenth century Anatolia; over time, state power became more commercialized, facilitating the access of newly-rich groups to the apparatus of the state through precisely such mechanisms as revenue-farming. Huri Islamoglu-Inan and Çaglar Keyder have argued that by the late seventeenth century, tax farming was widespread in the Ottoman empire, but that it eventually was transformed into a farm on a lifetime basis, the so-called *malikane* system. And, in the early eighteenth century, this in turn facilitated the rise of major provincial magnates, risen from

[82] Suraiya Faroqhi, 'A great foundation in difficulties: or some evidence on economic contraction in the Ottoman empire of the mid- seventeenth century', *Mélanges Professeur Robert Mantran* (Zaghonan, 1988), pp. 109–21; also see H. Inalcik, 'Military and Fiscal Transformation of the Ottoman State', in *Idem, Studies in Ottoman Social and Economic History* (London, 1985).

[83] For the new Indian historiography, see Muzaffar Alam, *The Crisis of Empire in Mughal North India: Awadh and the Punjab, 1707–48* (Delhi, 1986); Andre Wink, *Land and Sovereignty in India: Agrarian Society and Politics under the Eighteenth-Century Maratha Svarajya* (Cambridge, 1986).

For a reaction from the defenders of orthodoxy, see Irfan Habib's review of Wink, in *IESHR*, 25, 4, 1988, pp. 527–31. Even Habib concedes that agriculture 'probably' prospered in Maharashtra, but doubts whether 'such rural prosperity . . . also extended outside the Svarajya to the outlying regions'. For evidence that it may well have, see (among numerous other references) Alam, and Stewart Gordon, 'The Slow Conquest: The Administrative Integration of Malwa into the Maratha Empire, 1720–1760', *Modern Asian Studies*, 11, 1, 1977, pp. 1–40.

the ranks of merchants, money-changers and provincial *ulema*—the so-called *ayans*.[84]

The parallels between the picture summarized above and elements of the newer south Asian historiography are clear, despite the adherence by Islamoglu/Keyder to a rigidly Wallersteinian perspective in certain parts of their work. But one should not overly stress the historical parallels; significant differences existed too. Some of the most striking of these emerge from a comparison of the interface between the Ottoman and Mughal state structures and the economies from which they drew resources. In most respects, the Ottoman state appears more centralized, with access to far more complex fiscal systems, and a highly developed record-keeping apparatus. However, in one respect the Mughals were more 'statist' and this is in respect of coinage. It is evident that coinage was very closely bound up in the Mughal world-view with sovereignty itself; Mughal expansion in the Deccan in the 1630s, for example, led to the minting of a tributary coin in Golconda, to show the subservience of that state to Mughal authority.[85] Of course, in the Mughal case, there is the rare exception like the *mahmudi* in Gujarat; but in Bengal, which was conquered at roughly the same time as Gujarat, the *tanka* was done away with rapidly.[86] In this respect, the Mughal system paralleled that of the Safavids rather more than the Ottomans. The latter allowed the *pare* to circulate in Egypt, the *sahi* in the eastern reaches of the kingdom, and the *lari* and *mohammadi* for external transactions.[87] The essentially non-assertive character of the Ottoman state in respect of 'sovereignty through coinage is emphasized further in the late sixteenth and seventeenth centuries. Venetian, Spanish, German, and later Dutch and French coins were allowed to circulate freely in the kingdom, without having to be re-minted. Almost ironically, the *real de a ocho* is probably a better measure of Ottoman prices than the frequently

[84] Huri Islamoglu and Çaglar Keyder, 'Agenda for Ottoman History, *Review*, 1, 1, 1977, pp. 31–55; also see Halil Inalcik, 'Centralization and Decentralization in Ottoman Administration', in Thomas Naff and Roger Owen, eds., *Studies in Eighteenth-Century Islamic History* (Carbondale, 1977), pp. 27–52.

[85] Cf. S.H. Hodivala, 'The Golconda Rupee of Shah Jahan', *Journal of the Asiatic Society of Bengal*, (N.S.), vol. XII, 1917; J.J. Brennig, 'The Golconda Coinage of Shahjahan and Aurangzeb: A Mughal Tributary Coinage', *Journal of the Andhra Historical Research Society*, vol. 37, 1978, pp. 53–64.

[86] On the *mahmudi*, see Brennig, 'Silver in Seventeenth-Century Surat', pp. 482–4; van Santen, pp. 81–3.

[87] Sahillioglu, pp. 277–8.

devalued *akçe*. This holds a lesson for historians of south India, who are often apt to associate control over coinage too closely with state power, and hence conclude that the seventeenth century south Indian states (which for the most part were lax in their control of mints) were consequently weak in a general sense. In point of fact, the ideological underpinnings of coinage are more complex than such a view would suggest.

Towards a Conclusion

What conclusions emerge from this perhaps excessively discursive essay on prices, money and precious metal flows in west and south Asia? Most importantly, it emerges that the history of money and the money economy in these two regions is deeply enmeshed in the assumptions and constructs of a more general history of institutions there. The views of historians on the questions with which this essay is concerned are often inextricably entangled with their views on state formation, demographic history, the history of technology, as well as 'European penetration' of the world at large. If the 'Price Revolution' was once seen as the turning point which facilitated the rise of capitalism in Europe, historians of south and west Asia have equally used it as a sort of 'negative turning point', which signals the decline of their regions of interest relative to Europe. It is almost inevitable that the 'world-systems' school will see the crises of the seventeenth century as instrumental in the 'incorporation of vast new zones into the European/capitalist world-economy'.[88] The problems of specific manufacturing sectors will be seen as 'studies in underdevelopment', inevitable spin-offs of the inexorable march of European capitalism.[89] The assumptions of this school of thinking, which are felt much less in the south Asian historiography than that on west Asia,[90] are clearly

[88] Thus, see Immanuel Wallerstein, *The Modern World-System III: The Second Era of Great Expansion of the Capitalist World-Economy, 1730s–1840s* (New York, 1989), pp. 177–9, passim.

[89] Cf. Benjamin Braude, 'International Competition and Domestic Cloth Production in the Ottoman Empire, 1500–1650: A Study in Underdevelopment', *Review*, 2, 3, 1979, pp. 437–51; Murat Cizakça, 'Price history and the Bursa silk industry: A study in Ottoman industrial decline', *The Journal of Economic History*, 40, 3, 1980, pp. 533–50.

[90] See the papers by Islamoglu and Keyder, and Inalcik cited above; also Huri

erroneous. If south Asia and west Asia in the pre-colonial period were both 'world-systems'—as Braudel, Wallerstein, and others assert—trade between them was a trade in 'luxuries' and 'non-essentials'.[91] But was this really the case with coinage metals? What in fact was the nature of demand for monetary media in these economies?

Older economic theories tended to neglect the demand for money, seeing it as directly related to transactions (*pace* Fisher); in the Modern Quantity Theory, the level of output is seen as the key. In the latter formulation, the rate of growth of money supply could for the most part be decomposed into two elements: the rate of growth of output, and the rate of inflation. This was because the income-velocity of money was assumed to be constant (or at worst predictable). In fact, it is this assumption of the stability or predictability of the income-velocity which transforms the M = k.p.X *identity* into a *theory*. However, what are the determinants of 'k' itself? Modern empirical studies of agricultural developing countries show that the income-velocity (and hence its inverse) are not stable over time, and that the changes can in fact be systematically explained through a variety of factors.[92] It is possible to take this argument a step further and to argue that the demand for money must be posed in a far larger framework, in which social groups and institutions choose a portfolio of assets (including money), basing themselves on a variety of considerations, including liquidity, rate of return, levels of risk, as well as the information/degree of control they have over these factors.[93] Since many of these variables, as well as the preferences over them, are behavioural in nature, they would tend to vary from society to society, as well as over

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Islamoğlu-Inan, ed., *The Ottoman Empire and the World-Economy* (Cambridge/Paris, 1988).

91 I. Wallerstein, 'The Ottoman Empire and the Capitalist World-Economy: Some Questions for Research', *Review*, 2, 3, 1979, pp. 389–98.

92 Michael J. Driscoll and Ashok K. Lahiri, 'Income-velocity of money in agricultural developing countries', *The Review of Economics and Statistics*, 45, 3, 1983, pp. 393–401; also the older, but still useful, survey by Allan H. Meltzer, 'The Demand for Money: The evidence from time-series', *Journal of Political Economy*, 71, 3, 1963, pp. 219–46.

93 Here, I have a framework in mind that would bear at least a superficial family resemblance to that of James Tobin, 'A general equilibrium approach to monetary theory', *Journal of Money, Credit and Banking*, vol. I, 1969, pp. 15–29, reprinted in Tobin. *Essays in Economics, I: Macroeconomics* (New York, 1971). Of course, many of the specific qualitative results of Tobin's model would not necessarily go through, dependent as they are on assumptions concerning the functional forms of utility functions, etc.

historical time. The asset-portfolio, as well as the demand for monetary media, of a south Indian temple like Tirupati would differ systematically from that of a military-fiscal entrepreneur such as, say, the famous Mir Muhammd Sayyid Ardistani, even though they operated in much the same geographical region during a specific period (the 1630s and 1640s). It is possible in such a framework to have wide cross-societal and intertemporal variations in the demand for money, depending on factors including the menu of assets available, the social distribution of wealth, and so on.

It is now pretty well established that already in the seventeenth and eighteenth centuries in south Asia, groups other than urban-based nobility and merchants were engaged in activities involving the use of various monetary media.[94] This should not lead us to assume, as some recent historians rather naively have done, that 'the process of monetization (in India) had largely been completed' by the mid-seventeenth century.[95] Rather, it should serve to help us begin to understand the relationship between social structure and demand for money, and the evolution of both over time. In the absence of widespread and rapid inflation of commodity prices in terms of the major coinage metals in south and west Asia (at least at rates corresponding to the inflation of western Europe), it is evident that the rate of increase of money supply must largely be decomposed in terms of the rate of change of output, and that of the inverse of the income-velocity of money. A systematic analysis of the latter should clearly be on the agenda of historians of material life not only in south and west Asia, but elsewhere in the early modern world.

[94] Cf. Perlin, 'Money-use in late pre-colonial India'; also Sanjay Subrahmanyam, 'Rural Industry and Commercial Agriculture in late Seventeenth-Century South-Eastern India', *Past and Present*, no. 126, February 1990.

[95] Moosvi, 'Scarcities, Prices and Exploitation', p. 53.

Chapter Seven

An Integrated Pattern of Commercial Life in the Rural Society of North India during the Seventeenth and Eighteenth Centuries*

B.R. GROVER

I

Recent trends of historical research on the economic history of India have already made considerable progress on the analysis of Indian commercial life in the pre-British era, with special reference to aspects like the process of urbanization, the role of commercial classes in cities, and the nature and extent of inland and foreign trade. But not much attention has been paid to the commercial pattern governing rural society and to linking the latter with the urban, inter-provincial and foreign trade and commercial set-up. The lack of proper importance attached to this subject may be partly ascribed to the comparative paucity of contemporary sources as well as the desire to trace the history of business in India in the light of economic developments in the European countries during the pre-industrial age.

The problems and the methods of the study of the social and commercial history of India *vis-à-vis* pre-industrial Europe are quite different. This is both because of the difference in the extent of contemporary source-material as well as the variation in the stages of socio-economic development. The source-material of seventeenth-

* *Indian Historical Records Commission*, Proceedings of the thirty-seventh session, volume xxxvii (Delhi, 1966).

eighteenth-century European societies on the growth of cities, and the role played by business communities in ports, cities and rural areas, is very vast. With the development of new research techniques and the computation of data on a country-wise or regional scale, it is possible to attempt generalization and theorization about socio-economic problems. Despite some parallelism, the vastness of the Indian subcontinent offers regional variations because of the diversity in the geographical situations and the habits of the tribal peoples settled in different regions. Moreover, in medieval Indian history the socio-economic and political forces had diverse effects on the growth of different regions. The scattered source-material is equally unproportional in relation to time and areas. For some regions, ample source-material is forthcoming, which shortens the time-gap for gathering consecutive information, while for others the data is sufficiently time-gapped, and for still others practically no source-material exists. The abundance or paucity of the available source-material with regard to time and areas is bound to affect methodology in the technique of research so as to avoid sweeping generalizations. Moreover, there is an essential difference in the European *vis-à-vis* Indian concepts of the nature of urbanization in pre-industrial society. Except for the main cities, which had some rural features and were surrounded by rural areas, Indian towns (*qasbas*), unlike their European counterparts, showed more rural than urban features. Another factor responsible for insufficient attention paid to the commercial history of India has been the practical difficulty in the technique of research; research scholars are tempted to rely on direct evidence gleaned from the accounts of travellers, chronicles, geographical accounts and official records of foreign companies operating in India, than to scrutinize varying categories of regional sources in Persian and the local languages available for the seventeenth-eighteenth centuries.

II

The sources available for the history of business and rural commercial life are two-fold. Firstly, sources which give a general description of the commercial life of the whole of north India or particular parts thereof. Secondly, regional sources which provide us with a detailed insight into the commercial pattern.

(a) In the first category may be included chronicles, provincial

and regional histories, geographical treatises, the accounts of foreign travellers, official records of the European companies and the correspondence of their officials. Of the already well-known sources the following deserve special notice: *Ain-i Akbari, Mahzar-i-Shah Jahani, Khulasat-ul-Tawarikh* by Sujan Rai Bhandari, *Hadiqat-ul-Aqalim* by Murtaza Hussain Allah Yar Usmani Belgrami, *Mirat-i-Ahmadi, Riyaz-us-Salatin, Muntakhab-ul-Lubab* by Khwafi Khan, *Tarikh-i-Muhammad Shahi*, Firaqi's *Waqai Alam Shahi, Siyar-ul-Mutakhirin, Safar Nama-i-Anand Ram Mukhlis*, and *Tarikh-i-Gorakhpur*; the accounts of foreigners like Sebastien Manrique, Bernier, Tavernier, Manucci, Walter Hamilton, Twining, Grose, Alexander Hamilton, Verelst, Bolts, Vansittart, Pennant, Raper, Valentia, Hodges and Forster; the English and the Dutch Factory Records, and the 'Letters Received' from the servants of the companies; the correspondence of the officials of the English East India Company; and the Persian correspondence.[1] The main information available from these sources relates to the general description of commercial life in the provinces, specialized crafts and industries in the urban centres, and the nature and extent of foreign trade. The description of inland rural trade and the conducting of business transactions is incidental and has to be gleaned from the implied meanings in the statements offered. It is very rarely that descriptions of the prevalence of certain crops and crafts in the villages and *qasbas* have been grouped along with the main cities of the same province. However, it may be, reasonable to ask that, whenever the description of particular crafts and industries is available for the main cities of only the province, whether any commercial relationship between such cities and the rural *qasbas* of the same province can be established in this respect.

(b) A better picture of the rural commercial life and business transactions is available from the regional sources.[2] As the income to the State from the non-agricultural products levied in the village or a local *mandi* (market) was included under the heading of *sair-jihat*, the village, *tappah* and the *pargana* revenue documents essentially contain much information in this respect. At the same time documents are available which exclusively relate to State policy towards the local *mandis* and *katras* (commercial centres or markets), the movement of commodities from one *pargana* to another, and the activities of the

[1] For detailed annotation, see the notes that follow.
[2] Ibid.

trading classes in the local *katras*. All this information can be collected from the Rajasthan Archives, covering the *Subahs* of Ajmer, Malwa, Agra and Delhi; papers of private families with the National Archives of India relating to various *Subahs* of North India and the late eighteenth-century archives preserved in the Secretariat Records Office, Patna (Bihar). The Record offices of Bikaner, Kotah and Udaipur and the libraries in Udaipur specially (Vidyapeeth Collection, Udaipur) possess manuscripts, *Bahis* (ledgers) and documents (viz. *kharitas, ruqqas, tehris*, etc.) comprising correspondence among the merchants in the Rajasthani language contain vast information on the activities of merchant's loans, private debts, rate of interests, and the various commodities involved in business transactions, etc. Interesting information is available on the working of craft and mercantile organizations which exerted control over the production and sale of goods and also established contact with craftsmen in the *qasbas* and cities and exercised control over them. These organizations were recognized by the State and they regulated the trade and industry of the area. They had regular contracts with the *banjaras* who helped to maintain internal and external trade by carrying goods from one place to another. Thus it can be asserted that with a proper scrutiny of regional records, it is possible to construct a reliable picture of the commercial set-up and business transactions in the rural society of different regions of North India during the seventeenth-eighteenth centuries.

III

The concept of village self-sufficiency has been well exploded. In fact in a vast country like India with a great diversity of geographical and topographical conditions as well as varying degrees of socio-economic development, it is basically incorrect to talk of an 'Indian village' in general terms, for the stage of economic development of a village may differ from one *Subah* to another and may even vary from one region to another within a *Subah*. Villages generally grew cash crops and excessive grain crops for export to the local *mandis* or *qasbas*; they also responded to the regional prices and their economy was well integrated with that of the *qasbas* and cities. Only villages in the background regions maintained traits of self-sufficiency and a subsistence economy. Regional archives point towards the interdependence of groups of adjacent villages on the local *mandis* both for commercial

crops and non-agricultural products. Within a *pargana* or a larger territory, a few commercial centres named *mahals* or *katras* served as links between villages and *qasbas*. The *qasba*, apart from serving as the administrative headquarters of the *pargana*, was also the main commercial centre of the rural areas. However, today if there is a strict line of demarcation between the rural and the urban areas in medieval Indian society a *qasba* with its jurisdiction over *tappahs*, *katras* and villages was more a part of the rural society than an urban centre. Certain big villages (*muwazai-i-kalan*), *katras* and *qasbas* were known for established *mandis* dealing with grain crops, commercial crops as well as goods and animals. Contemporary evidence points to the establishment of regular *katras* in the *Subahs* of Malwa and Ajmer (Rajasthan) and the prevalence of the *mahals* (here in the commercial sense) in Bihar, which served as markets in the rural areas.[3] It was equally true of the other regions of North India though the local names for such markets varied in accordance with the local dialects. These commercial centres served as *mandis* where the rural population could sell their surplus agricultural and industrial goods for regional consumption as well as export to the main cities. Similarly, the rural population would purchase from these *mandis* such commodities not available locally and which were imported from the other *mandis* of the cities. Moreover, grain crops assessed in kind were collected by the official revenue staff (of either the *khalisa* administration or the Jagirdars as the case may) and transported to such *mandis* for sale to

[3] For *Katras* in *Subah* Malwa, see *hukam* of Nur Jahan, dated seventeenth *Bahman*, 19 R.Y., Jahangir/1623–4, confirming and narrating the duties of Jagjiwan Das s/o Mathura Das in the office of the Qanungo in *Sarkar* Chanderi, *Subah* Malwa. The document is from the personal collection of Shri Jagmohan Lal Mathur of Udaipur, acquired by the National Archives of India. Also see S.N. Mukhlis, p. 47. For *mahals* as commercial centres, see *Farhrist-i-tappajat pargana Bhagalpur*, dated *Fasli* AD 1179/1771, Secretariat, Central Record Office, Patna. These documents are attached to the *Raqbabandi* documents of Akbar's reign. Though the nature of these two documents is different, the identical names of the villages, *tappahs* in the *pargana* show how the practice of noting down the names of the commercial centres (*mahals*) in the *pargana* was inherited from the Mughal age. For a detailed discussion on the importance of the documents, see my papers Raqbabandi Documents of Akbar's Reigns in *The Indian Historical Records Commission Proceedings*, vol. 1961, pp. 55–60. For *ganjs*, see ibid. and C.P.C., vol. VIII, (1788–89), pp. 241–3, relating to Awadh and the territories of the English East India Company. For rural markets and marts in the hilly regions, see Traill, pp. 192–6.

the merchants (*beoparis*).[4] Depending on the nature of the regional products some *mandis* specialized in certain commercial crops or other goods. Ordinarily the *katras* or the *qasbas* which served as the local *mandis* were connected with the other villages and the nearest main city through regular means of communication and indigenous road-works. Similarly, in the riverine regions the villages and the *mandis* were connected with the rural parts either through roads or canals.[5] Many a village fell on the land trade routes or on the bank or near the rivers and waterways which served as the commercial depots for the traders.[6] Apart from this, it was an old established Indian practice for the central villages surrounded by a group of small feeding villages to hold weekly or fornightly local *mandis* where goods were bartered or purchased by the agriculturists or artisans. Certain villages were known for religious or cultural fairs which equally served the purpose of the local markets.[7] At times, temporary *mandis* were established at open places (known as *hauts* or *peeth* or *peth*) on the bank of a river or near sacred places during religious fairs.[8] These places were not regular villages or towns but they acquired the status of seasonal *mandis* on a permanent basis.

The occupational and artisan classes were concentrated in the

[4] Raj Archives Misc. Persian Letters to state officials and to the officers at the Mughal Court, Regd. No. 57, dated AH 1104, 37th R.Y., Aurangzeb/AD 1693, gives a detailed account of the sale of grain crops at Kobahar, *qasba* Toda Bhim, *Subah* Akbarabad, by the *mutsaddis* of the jagirdar to the merchants (*beoparis*).

[5] M.S. Jahani, pp. 18–19, 62, 65–6, 145, 172 and 186–7. The eleven *parganas* of Sehwan (*Subah* Thatta) were well connected through a river and canal system. Four rivers passed through *pargana* Narun. There were four navigational canals (*Guzar*) in Sehwan which connected the rural areas. Also for Thatta, see Hamilton, vol. I, pp. 71–9. For other regions, see Hodges, pp. 26 and 43. This has been a common sight in India until recently, especially in regions which are not well connected with the main *pakka* roads or the railway system.

[6] Ibid. Also see Valentia, vol. I, pp. 90, 181 and 194; Traill, pp. 192–6, giving details of rural manufacturers and markets in Rohilkhand and Kumaon; and Hodges, p. 33.

[7] Sujan Rai, pp. 35–6 and 66–9; Chaturman Saksena's *Chahar Gulshan*, compiled and edited by Chander Bhan Kaist Saksena, AH 1173/AD 1759–60; MS in Abdus Salam Collection, no. 62/292, Muslim University, Aligarh, fols. 24b–88b; Firaqi, p. 136; Traill, pp. 140–55, 193, 195 and 216–17; and Pennant, vol. II, p. 283. For commercial transactions effected in a religious town like Hardwar, see Raper, pp. 450–6.

[8] Ibid. Also, Hamilton Walter, *Geographical, Statistical Description of Hindoostan and the Adjacent Territories* (London, 1820), vol. I, p. 38; and Traill, pp. 216–17. This practice has continued in the rural areas till today.

villages which were well connected with the local *mandi* and the main *qasba* by roads. A small village may only comprise of an agricultural population but a big village may be inhabited by certain occupational castes as well.[9] A village may be dominated by the artisans of a particular occupational caste like the carpenter-cum-blacksmith or the goldsmiths or the weavers or the dyers or the scentmakers or the potters or the shoe-makers. Such a village would be known for the craftsmanship of its dominant occupational caste and would also serve the needs of the surrounding villages. The craftsmen usually sold their goods in their residential-cum-shop premises. Production was carried on by them with their own tools and equipment on an individual basis. They usually bartered their services or goods. The occupational workers rendering services to the agriculturists were entitled to the customary share from the crops of the *riaya* and a few of them even got some land in *inam*.[10] In various regions, there were settled tribes who took to agriculture and the breeding of animals like horses, camels, oxen, buffaloes, cows, sheep and asses, etc. The latter to trade in animals. They also paid the land revenue and cesses (*sair*) on sale of their goods in terms of animals rather than in cash.[11] There were also vagrant

[9] An original *Farman* of Bahadur Shah I, dated 23rd *Muharram*, 4th R.Y., AH 1122/24 March AD 1710, while narrating the *muqaddami* rights of village Annasagar (*pargana* and *Subah* Ajmer), refers to both agricultural and non-agricultural residents, including professional castes in the village. Of the latter, only two castes, i.e. scent-manufacturers (*attars*) and greengrocers (*baqals*), are mentioned. Also, see *Cavendish Enquiries* by Honble Richard Cavendish, the Superintendent and Political Agent of Jodhpur and Ajmer etc. (AD 1829–31). The enquiries were related to District Ajmer and based on a village and pargana-wise survey. They were written in Persian and the volumes are available at the District Records Office, Ajmer. *Cavendish Enquiries* gives details of the agricultural and non-agricultural classes of all the villages and parganas in District Ajmer. The references on the subject in *Waqai-Ranthambore* (AD 1678–80), MS. 2242, Asafiya Library, Hyderabad, and the other revenue literature of the seventeenth-eighteenth centuries, correspond with the names of the professional castes mentioned in the *Cavendish Enquiries*. Also see Long, vol. I, p. 97; Hodges, p. 27; and Valentia, vol. I, p. 207.

[10] *Siyaqnama* (AD 1694–96), MS. No. 858, Central Records Office, Hyderabad, fols. 6a–14a; Br. Mus., Add. Mss. No. 6603 (Yasin's Glossary) for. 62a; *Dasturulamls* no. 676, Central Record Office, Hyderabad, fols. 7b–8b (most of the description is of the Deccan). For Punjab, see Denzil Ibbetson, *Punjab Castes* (Lahore, 1916), pp. 266–338. For Bengal, see Arthur Phillips, *Land Tenures of Lower Bengal* (Calcutta, 1876), pp. 1–40.

[11] Sujan Rai, pp. 14–15, 36, 44, 75 and 80 (general description of various regions). For Rajasthan, see Raj Archives, *dastak*, dated 11 Rajab AH 1124/AD

tribes moving from one place to another in search of good grass and some cultivable land. They took to agriculture as well as grass products.[12] In the regions where no cultivable land was available, such tribes took to fishing and cutting grass to sell and paid lump-sum revenues (*sair*) to the state. Certain Gujar tribes adept in cattle-rearing and the sale of milk moved from one jungle to another, and at times had seasonal movements from the plains to the hilly areas and back. They also paid lump-sum revenues (*sair*) to the state.[13] Some of these Gujars purchased and sold petty articles *en route* their seasonal movements.

The commercial pattern of a *qasba* ran on different lines. The Rajasthan Archives give a fairly reliable picture about commercial life in the *qasbas* of Rajasthan and Malwa.[14] In a *qasba*, normally different craftsmen lived in separate streets. Each craft and trade was concentrated in a separate street where the craftsmen had residential houses, workshops and shops. This may also have happened in big villages where a few occupational craftsmen lived in concentrated pockets. Thus, in the *qasbas*, the shops of the cloth dealers, thread workers, dyers, tailors, perfume sellers, potters, shoe-makers, washermen, basketmakers, ironsmiths, oil-pressers, painters, bangle manufacturers, barbers, utensil-manufacturers, physicians, confectioners, grocers, retail shopkeepers, goldsmiths, jewellers, *sahukars*, *sarafs*,

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1712, in Persian Documents, Register 11, no. 525 (North West Rajasthan), and *Vat Sangrah*, fol. 24, which mentions many pastoral classes of *gayaris* in South Rajasthan. For Sehwan (*subah Thatta*) tribes like Baloch and Sanriha etc., see MS. Jahani, pp. 59–60, 69, 85 and 134. Valentia, vol. I, p. 222.

[12] Ibid. For the migratory habits of the zamindars of the southern *parganas* of Kumaon who indulged in petty trade of the regional products, see Traill, p. 193.

[13] Sujan Rai, pp. 63 and 74 (for *subahs* of Multan and Gujarat). The Gujars settled in the *subahs* of Lahore, Delhi and Ajmer (Rajasthan) were in this trade till recent times.

[14] Sujan Rai, pp. 28–33. The following throw light on the *qasbas* in Rajasthan; regarding Udaipur *qasbas*, Man kavi, *Rajvilas* (Hindi), V.S. 1734–1737/1677–78 to AD 1680–81, Canto II, VV, 92–136, Saraswati Bhandar Library, Udaipur; regarding Jodhpur *qasbas*, the *Abhayavilas* (Rajasthan), fol. 17; Bikaner *Gazal* (Rajasthani) in Nahata collection, Bikaner, V.S. 1765/AD 1708–09, Verses 4–5, 11–8, 27–8, 38, 44–5 and 57–8; and Jaisalmer *Gazal* (Rajasthani) in Nahata collection, Bikaner, V.S. 1822/AD 1765–66, Verses 70–5.

For the Commercial set-up in the *qasbas* of the other territories of north India during the seventeenth century, see Sujan Rai, pp. 28–83; for the eighteenth century, Valentia, vol. I, pp. 84, 115 and 194, Traill, pp. 146, 149 and 195–6 and Raper pp. 497–8 and 528.

arm-manufacturers were ordinarily located in different lanes. In the main *qasbas* which constituted the headquarters of the chief zamindars (rajas etc.) many shops dealing in cloth, armaments, scents, fruits, garlands, betels, bangles, sweets, etc. would be located on the main street of the *qasbas*. A number of artisans, such as arm-repairers, painters, wood-workers, leather-workers, oil-pressers, wine-manufacturers and shoe-makers would have their shops in the side lanes. This pattern of commercial life may have been true only of the big *qasbas* and may not have been applicable to all the regions of north India. The concept of commercial life in a *qasba* was essentially governed by the geographical situation, the commercial importance of the *qasba* and the population residing therein. However, the tendency of businessmen and craftsmen of the same trade to have consecutively adjacent shops in these lanes was quite wide-spread.[15]

The profession of artisans and occupational castes was mostly hereditary, and this helped in acquiring proficiency in the art to an admirable degree.[16] Different castes took to different occupations. In trade and commerce, many regions in North India developed local guilds or corporations with which local representatives from a big village or group of villages were associated. The Rajasthan sources refer to *panchs, panchkul, mandapika, ghosthi (or gosti), sangh* and *shershti* (or commercial groups) which clearly show the existence of craft and mercantile organizations.[17] In view of the extraordinary expansion of trade and commerce—inland and foreign—in the sixteenth-seventeenth centuries and also the fact that, by and large, the villages of north India were regularly integrated with the *qasba* and the city markets, there is every possibility that such commercial organizations representing the villages may have been equally known to some other parts of north India. They had some control over the production and sale of the products as well as the conduct of the craftsmen. Eighteenth-century Bengal documents show that in rural

[15] For the eighteenth century, ibid. This is still the practice in many a *qasba* in the rural areas of Punjab.

[16] *Waqiyat-i-Baburi*, Bibliotheque Nationale, Paris, MS. Pers. 260, fol. 360; *Ain-i-Akbari* (tr. Blockmann), vol. I, pp. 93–6. *Bernier's Travels*, trs., A. Constable (London, 1916), vol. I, p. 259.

[17] *Epigraphia Indica*, vol. VIII, p. 27, and *Jain Inscriptions*, vol. I, Nov. 726, 837–847 and 879. These inscriptions cover the period from the twelfth to the seventeenth century. *Mandapika* refers to corporate organizations in towns, *gosti* to a managing committee of a corporate body or merchant community, *sangh* to a union, and *Shershti* to a leader of the commercial groups.

society the *mundels, chaudharies* and zamindars had as much jurisdiction over craftsmen and regulation of local trade as over agricultural and land revenue.[18] The artisans of different professions, i.e. the weavers, bricklayers, smiths, braziers and handicraftsmen were incorporated into their respective bodies, one in each pargana. They elected a *chowdree* (*chaudhari*) or chief to represent them, and the *mundells*, i.e. *muqaddams* of every *pargana* rendered monthly accounts to the Zamindars (in Bengal) in respect of every artificer residing within their limits. The *chaudharis* were supposed to inform the Zamindar about the just and the true rates of all types of labour, and the rate per day of all types of labourers and artificers were fixed. These details and those of the shopkeepers were recorded in the zamindar's ledgers. All artificers were to be licensed. While introducing these regulations, the English East India Company thought that it was reviving the old system of the village communities. Besides that, at the *qasba* level, there were *bazar panchayats* which took voluntary decisions relating to commercial matters.[19] The mercantile organizations and the *bazar panchayats* made voluntary charitable contributions to religious institutions or holy persons either by levying a tax on the sale of articles or by a cess per shop in a particular village or a *qasba*. At some places, these organizations exercised a tight control over the services in the temples. At times, they also contributed to public welfare for the construction of wells and roads. The guilds were recognized by the state. They regulated trade and industry of the area and looked into the payment of state taxes and customs duties (*sair-jihat*) levied on commercial goods in accordance with scheduled rates. In fact, the *chaudhari* of a *mandi* served as the link between local businessmen and the state.[20] The *chaudhari* was responsible for the payment of the revenues and worked under the supervision of the *amin wa darogha-i-sair*.[21]

[18] Lon. vol. I, para 240, p. 97, proceedings 7 April 1757.

[19] Vide official order dated 25th *Ramzan* 14th R.Y., Muhammad Shah, AH 1141/AD 1730 communicating the decision of the *panchayat* of the *bazar* of *qasba* Mohiuddin (sarkar Bari Doab, *subah* Lahore). From this, it is seen that *panchayat* levied one tanka (Alamgiri) on each shop as voluntary religious donation to Gosain Hira Nath of the Jogi family of Jhakpar (Tehsil Pathankot, District Gurdaspur, Panjab). The family documents are in the possession of the Panjab University, Chandigarh. I am obliged to Dr J.S. Grewal of Panjab University for having drawn my attention to the document.

[20] *The English Factories in India (1618–21)*, ed. W. Foster (Oxford, 1906–7), pp. 198, 269 and 273–4.

[21] Raj Archives, Misc. Persian Letters, no. 249 (Aurangzeb's reign) and no.

The trading communities had a network of establishments in the rural and urban commercial centres, thereby linking the rural commercial life both with the urban and international trade. Apart from wealthy merchants settled in the main cities and ports, known as *sahus or sahukars* and *kothiwalas* (bankers)—who carried on import and export business on a large-scale and are quite well known—there were merchants of varying financial levels settled in the *qasba* who indulged mostly in inland trade, though a few of them also carried on foreign trade. In a large *qasba*, the shops of the merchants surrounded by those of the *banjaras* (caravan merchants) were located in the central street. The agents of wealthy city merchants and foreign trading companies were in contact with the brokers (*dalals*) and the local *qasba* merchants to acquire the necessary commodities. The Rajasthan Archives mentions the names of several merchants who were engaged in trade both within Rajasthan and on an inter-provincial basis.[22] Their agents purchased grain, cash crops as well as industrial goods from the villages, small *qasbas* and rural *mandis*. They sold these commodities at a profit for consumption within Rajasthan and to export to other provinces. Similarly, they supplied outside commodities to small *qasbas* and villages. These merchants, through their agents, provided raw material to the weavers, gold and coppersmiths, glass manufacturers in the *qasbas*, and the villages where artisans worked on the 'putting out' system. Though working on an individual basis was well-known, a considerable number of weavers, dyers and washers worked on the 'putting out' pattern. Thus, craftsmen and the artisans worked both on personal as well as 'putting out' basis. In the latter system, the Indian merchants and the foreign trading companies which procured industrial goods kept a good deal of margin for their

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355 (25th R.Y. of Aurangzeb, AH 1093/AD 1682).

[22] Raj Archives, *Dastur Komwar* (based on *toji* records), vol. XV, fol. 85, dated V.S. 1799/AD 1742–43, and *bhandar* no. 16, *basta* no. 6, V.S. 1821, 1842, 1855–56 and 1863/1764–65, 1785–86, 1798–1800, and AD 1806–1807. Letter from Hira Chand to Rai Chand dated 1st bright-half) *Kartika*, V.S. 1754–/6 October AD 1697, in the Vidya Pith Collection, Udaipur (the Old Deposited Records, of the State Archives, Udaipur). Amar Singh II's patta to Devadatta, dated 3rd (dark half) *Posh*, V.S. 1763/10 January AD 1707. The above documents give the names of the Gujarati, Malwai, Punjabi and Kashmiri merchants settled in Rajasthan. Raper, pp. 497–8, mentions that in Kumaon (Srinagar and Almora) the petty shopkeepers served as agent to great *sahukars*, merchants and banking houses engaged in the sale and exchange of merchandise and coins in Najibabad and the Doab.

profits. The merchants (*saudagaran* or *beoparis*) or their agents would even purchase or sell goods at the individual village level.[23] In riverine regions connected through waterways, the merchants had a network of establishments and agents at various village-ports and inland villages inhabited by various tribes and clans. They imported and exported goods on a large-scale. Seventeenth-century documents show that in certain regions people viewed visiting *beoparis* (merchants) as village guests who served the essential needs of the village community.[24] They were entertained at the expense of the village revenue and the cost of rations for their entertainment during their stay in the village was debited to seasonal state revenues. This relieved the villagers of the responsibility of taking to and bringing from *mandis* the goods they needed. The merchants had all the apparatus of transportation for this purpose. The margin of profit could not have been large enough to exploit the rural population; otherwise the concept of treating the *beoparis* as village guests could not have existed.

In every province there were mercantile castes who, except for hawking or peddling, carried on mercantile and commercial transactions. These mercantile castes were known by different names in different provinces. Every mercantile caste operated in a certain region with their territorial jurisdiction more or less marked. The territorial beats of these commercial castes were based on inherited custom and business. Trade in liquor and vegetables and traffic in cattle were carried on by the occupation castes who were considered comparatively inferior in social status to the other mercantile communities. In South Rajasthan and other such regions where agricultural occupation was not possible, there were pastoral tribes of varying grades who specialized in the breeding and rearing of different kinds of animals and birds.[25] They took to the breeding of animals like cows, oxen,

[23] Sujan Rai, pp. 43 and 77. Bahadur Shah I's *Farman* of AD 1710 referred to in note 9 above gives details of the transactions of the *beoparis* (merchants) engaged in purchasing scent etc. from village Annasagar (*pargand and subah* Ajmer), Raper, ibid., Traill, p. 196, states that in Tarai and even in the hilly region of Kumaon, the Zamindars were in contact with the merchants of Rampur and the other towns of Rohilkhand. They had established local *mandis* and marts. Only in the isolated regions, were the Zamindars who indulged in trade obliged to sell their goods at a low price. However, *Kuth* and other lighter articles were carried by hackeries, buffaloes and *tatoos*. *Kuth* was prepared by the people of the Dom caste on the putting-out system.

[24] *Khulasatu-s-Siyaq* (AD 1703), MS. NAI, pp. 61–3.

[25] See note 11 above. Also Raj Archives, P.C., Register V. Letter No. 1587,

horses camels, sheep, and goats, and rearing hawks, parrots and other birds which were sold to the nobility or other well-to-do classes in the main *qasbas* and cities. In Rajasthan, the Malani tribe[26] bred cows, oxen and horses, the Rebaris[27] bred camels and the Gayaris[28] reared sheep and goats. Some of the inferior tribes specialized in catching birds and animals from the jungles, which were then sold in the markets. The names of the seventeenth-century pastoral and animal breeding tribes are available for the *Subahs* of Thatta, Lahore and Delhi.[29] Apart from this, there were peddling castes which specialized in certain merchandize commodities—petty peddlers and hucksters moving from one village to another. They sold rope, grass mats, petty hardware, earthenware such as pipe-bowls, images meant for decoration and for children, *pan*, betelnuts, etc. A few among the peddling castes were also engaged in cattle trade and traffic in small merchandize on a large-scale. A few among the mendicant class too acted as roving merchants.[30] The vagrant and gipsy tribes with varying occupations, manufactured and carried with them articles to sell such as grass, ropes, straw and reeds, matting, coarse sacks for pack animals, and grass brushes used by weavers.[31] They also reared animals like sheep,

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dated 10th *Zulqada* AH 1107/11 June AD 1696. Many such tribes lived in the forests around Gagron.

[26] Fol. 46 of *Raj Villas* (Hindi), V.S. 1734–37/1677–78 to AD 1680–81, MS. No. 354, Saraswati Bhandar Library, Udaipur, gives the physical features and tribes of Mewar.

[27] *Jaitpur Bahi*, dated V.S. 1726/AD 1669–1670, Raj Archives. Also, *bhandar* no. 1, *basta* no. 57, *nathi* (i.e. attached documents) no. 13, all of V.S. 1815/AD 1758–59, Raj Archives.

[28] See note 11 above.

[29] Br. Museum, Add. Mss. No. 16859, *Arzidasht-i-Muzaffar Khan*, fols. 2a–4a, 115a and 120b, and letters of Jalal Hissari and Balkrishan Brahman, fols. 28b, 52a–b and 56 (Shah Jahan's reign). Sujan Rai, pp. 17, 60 (Thatta) and 63 (Multan). In Thatta, there were hereditary itinerant fisherman and graziers. Pennant, vol. I, p. 35. The province of Lahore was known for horse studs. Cross breeding with Persian and Arabian horses was practised for the further improvement of the breed. The *subab* of Lahore supplied the best cavalry to the Mughal state. For details, see ibid., p. 41. In Tyroot (*Subah* Bihar) there were breeding studs of horses of different breeds i.e. Arabs—Tazzies, Turkoman, English, Persian and the cross of these breeds, Valentia, vol. I, p. 22.

[30] Raper, pp. 450–2 and 456–7. A large number of Gosains indulged in commercial and agricultural pursuits. Various Hindu pilgrims to the cultural and religious fairs carried on petty trade.

[31] See note 11 above. For nineteenth century Punjab, see Denzil Ibbetson, *Punjab Castes*, pp. 271–90.

goat and camel which were then sold. While staying near the villages, they were also employed to do earthen work, fishing, diving and sinking wells.

The rural mentality was to export commodities to the main *qasbas* and cities. The rural areas supplied food, commercial crops and industrial goods to army camps and cities. Wherever army camps were stationed, the grain prices of the area rose considerably.[32] During normal times too, regions with surplus grain crops exported them to the deficit regions and even to foreign countries.[33] In Bengal, people lived on rice and fish and were not used to wheat, which was exported to southern India, the Portuguese possessions on the western Indian coast, and abroad. Bengal also exported sugar and wheat to Gujarat. Bengal herself imported wheat from Bihar for further export. Kerala received opium, sugar and rice from Bengal by sea. The provinces of Bihar and Agra imported sugar and rice from Bengal. Gujarat imported foodgrains from the *Subahs* of Malwa and Ajmer and rice from Malabar and the Deccan. Above all, the rural areas producing cash crops developed a high degree of commercial sense for production. Cotton, sugarcane, oilseed crops (barring ground nut), dye-yielding crops were grown practically all over the country. Though indigo was cultivated in the *Subahs* of Multan, Lahore, Delhi, Malwa, Allahabad and Awadh, it was a highly valued commercial crop grown in Sehwan (Subah Thatta), Bayana and Doab (*Subah* Agra), Mewat (*Subahs* of Agra and Ajmer), and Sarkhej (*Subah* Gujarat). The indigo of these places was sent to all parts of India and abroad. Agra indigo acquired world fame. Opium was grown in the *Subahs* of Ajmer, Malwa and Bihar. It was in demand all over India. Bengal imported it from Bihar and sent it to Kerala and abroad by sea. Mewar (*Subah Ajmer*) and Malwa opium was in great demand in China, South East Asia, Arabia and Persia. Tobacco introduced in India in the early seventeenth-century was grown all over India and was consumed both in rural and urban areas. The commercial policy of the Mughal state gave utmost impetus to the growth of cash crops. With the expansion of the Mughal empire in the sixteenth-seventeenth centuries, the growth of services, both military and civil at the centre and in the provinces, and the heavy

[32] Raj Archives, *Akhbarat*, dated 15th *Muharram* 36th R.Y. Aurangzeb/8 October 1692, quotes the price of grains in the camp of Prince Kam Baksh. Wheat: Re. 14 seers; and rice; Re. 15 seers. Various other examples can be quoted.

[33] *Ain-i-Akbari*, Hamilton MS., Tuebingen University (W. Germany), fols. 150b–242b and Sujan Rai, pp. 28–83.

expenditure of the state, posed new problems. The state needed vast revenues which were possible only with a dynamic approach for an increased agricultural output and highly developed trade and commerce. In the course of the late sixteenth and seventeenth centuries, both inland and overseas trade increased at a rapid scale and had a great impact on the agricultural development as well as rural and urban prosperity. The need to feed the heavily populated urban centres, the growing population of the commercially developed rural areas and *qasbas* and the military camps led to an everincreasing inter-regional and inter-provincial dependence on foodgrains. Cash crops like indigo, sugarcane, cotton, oilseeds and opium were in heavy demand for export, as finished industrial products to foreign markets. All this tended to break the parochial village outlook of producing crops for mere self-consumption and local supply. An Indian village in the developed regions no longer lived in economic isolation. These changes led to an increase in the land under cultivation and in the volume of agricultural produce. This not only increased the land revenue and the income from the imposition of sale and customs duties, but also earned a favourable balance of trade. The indigo of the province of Agra was in great demand with foreign merchants and trading companies. The indigo business was so lucrative that the Mughal state started giving monopoly of its sale to the contractors (indigo farmers).[34] The Mughal state even financed the contractor for purchasing indigo from the various local *mandis* and entered into an agreement with the latter, keeping its stipulated share in the profit of the sale proceeds. It also offered quite reasonable terms to the indigo farmers who, in case of little profit, would be obliged to return only the state loan. The indigo farmer had the monopoly on sales of indigo to local merchants and foreign trading Companies. This resulted in the rise of the indigo price and greater returns for the state. Apart from this, the fact that the English and the Dutch East India Companies always competed with each other in purchasing indigo for their foreign markets was equally conducive for the rise in price. Whenever there was a good indigo crop of fine quality, wealthy Indian merchants liked to keep up the price by withholding stock for clearance in the ensuing year. The indigo cultivator was also very alive to the fluctuation in its price and the international demand. This is well illustrated by an

[34] W. Foster (ed.), *The English Factories in India (1630–33)* (Oxford, 1906–07), pp. 324–5.

incident over the indigo price of AD 1633.[35] In that year, the rights of indigo sale were farmed out by the Mughal state to an Indian contractor. Due to the Deccan wars, the Parsi merchants refrained from purchasing the Deccan goods and concentrated on the purchase of the Agra indigo. Consequently the indigo price shot upto Rs 50 per (Akbari) maund. In fact, this price was much higher than that in the preceding or following years. Ordinarily, the English and Dutch East India Companies preferred to purchase Agra indigo (here too the Koel, i.e. Aligarh rather than Bayana indigo) to the indigo of other regions. In the face of such a high price of Agra indigo, the English and Dutch Companies felt reluctant to purchase it. The English Company even considered the possibility of acquiring direct farming rights from the Mughal state but gave up the idea due to the practical difficulty of dealing with Indian merchants. Ultimately the two Companies, namely the English and the Dutch, thought of reaching the mutual agreement of abstaining from indigo purchases. As the proposal was initiated at Surat, indigo cultivators of the Agra province, fearing a slump in the market in the ensuing year, immediately uprooted their indigo plants and cultivated other crops instead. Other sources equally reveal how conscious the indigo and melon-growing villages in the territory of *Subah* Thatta were of the importance of the export of their commodities to other regions and the international market.[36]

Trade in the industrial products of many a region of north India was well established. Most villages and *qasbas* in the *Subahs* of Bengal, Orissa, Bihar, Allahabad, Agra, Delhi, Lahore, Sindh and Kashmir produced a variety of piece goods.[37] The regions of Allahabad manufactured cotton cloth known as *jhonah* and *mibrkul*, which was exported to Agra, Delhi and other places. Cotton and silk-weaving were done by peasant families or the landless class during the season. They combined agriculture and weaving. Apart from this, there were

[35] Ibid.

[36] M.S. Jahanj, pp. 211–12. Pennant, vol. I, pp. 31–7. Exports from Multan to Persia included cotton, sugar, opium, brimstone, galls, camels and bows.

[37] *Ain-i-Akbari*, Hamilton MS., Tuebingen University (W. Germany), fols. 150b–242b. Sujan Rai, pp. 28–83. Raper, vol. XI, pp. 450–540. Traill, pp. 192–6 (Kumaon manufactures) and p. 226 (exports from the Kumaon hills to the plains). Long, vol. I, p. 250 (Bengal). Pennant, vol. I, pp. 50, 71, 79 and 80. Pennant, vol. II, p. 272 (silk in Assam) and pp. 228–31 and 233 (saltpetre, opium, salt and tobacco and rice in Bihar). Valentia, vol. I, p. 231 (indigo in Bengal) and pp. 77–8 (silk industry in Bengal). Hodges, p. 27 (handloom industry in Bihar). Hamilton, pp. 71–9 (Thatta).

the *Chamar* castes who took to leather-working, tanning and weaving. Even though they did wholetime weaving jobs and thought themselves socially upgraded as against the scavengers, they were by and large considered village menials. They worked in lieu of a fractional share in the produce of the cultivators, though a few Chamar-Julaha castes worked as paid artisans. Technically speaking, in the social hierarchy a weaver (known as Julaha or Tanti or Paoli) was an artisan rather than a village menial. The Julaha as a wholetime weaver belonged to a low caste, both amongst the Hindus and the Muslims. He was paid by the piece rather than by customary dues. The Julahas were concentrated in certain villages and *qasbas*. They worked both as an individual and on a 'putting out' system. Though cotton was woven practically all over India, the provinces of Bengal, Awadh, Lahore and Sindh exported large quantities of cloth. Various qualities of coarse cotton were woven in Assam and Bengal. The provinces of Agra and Bihar received raw silk and textiles from Bengal. Agra also imported cotton and cotton textiles from Gujarat and Khandesh. Silk was produced largely in Assam, Bengal, Awadh, Sindh and Kashmir. The provinces of Bihar, Agra and Gujarat imported raw silk from Bengal. Despite the fact that Gujarat imported silk from a long-distance, it had a large-scale silk weaving industry and exported its products to other parts of India. Similarly, the *Subahs* of Agra (Fatehpur Sikri), Lahore, Kashmir and the western coast had a developed silk-weaving industry.

The industrial products of commercial regions in many a province of north India were exported to other places. Kashmir manufactured and exported silk cloth, shawls, blankets, woollen cloth on a large-scale and of various fine varieties, wooden articles and paper; Sindh—silk cloth, cotton textiles, skin-hides, wooden articles, ivory bangles, gumlace and saltpetre; Lahore—cotton textiles, shawls, blankets and paper (specially in Sialkot and the surrounding villages); Delhi—shawls, blankets, utensils of copper, brass and other types, paper, *huqqa* (for smoking) and glass vessels; Agra—utensils of copper brass, wooden articles and paper; Allahabad (especially in the Jaunpur Sarkar)—wooden articles, glass vessels, paper, gumlace and needle; Malwa—clothweaving; Awadh—saltpetre, gumlace; Bihar (especially in Sarkar Monghyr)—wooden articles, glass vessels and other domestic utensils, saltpetre, paper, gumlace, iron articles like grid irons, sauce pans, forks and knives; Bengal—muslin, cotton textiles, woven silk, woven jute cloth and mats; Assam—silk weaving. The

Himalayan regions manufactured woollen cloth of various varieties, animal skins, gums, timber, fuel, herbs and fruits. Many of these articles were produced in other hill regions and forests which covered a considerable portion (nearly half) of north India. Gujarat occupied an extremely important position in Indian commerce and was known for cotton textiles and silk weaving. Silver was scarce in India. Gold and silver were imported as bullion in exchange for agricultural and industrial products.[38] Ornaments of gold, silver and metals were made all over the country. Iron was extracted in plenty from surface ores and melted in small furnaces near mining sites practically all over India (except the western coast). The agricultural and industrial implements made of wood and iron were manufactured in all the provinces. Copper and various types of precious stones were available in Rajasthan. Copper was a state monopoly and was exported to other regions of India.[39] Sixteenth-seventeenth-century sources reveal that unlimited quantities of salt were procured from rock salt at Khukra, Kheora near Shamsabad, and at other places in Sind Sagar Doab (known as Sindhi Salt), *Subah* Lahore.[40] There were salt pits in Thatta (*Subah* Sindh). The Sambar lake and other salt lakes in the deserts of *Subah* Ajmer produced a large quantity of salt.[41] These regions supplied salt all over north India at a very cheap and reasonable price. Salt was scarce in Bengal and was imported from long distances.[42]

[38] John Van Twist. A General Description of India (AD 1638) in Brij Narain, *Indian Economic Life* (Lahore, 1929), pp. 56–67. Under the Indian regulations, the export of gold and silver from India was forbidden. For details regarding the favourable balance of trade, see ibid. and Balkrishna, *Commercial Relations between England and India (1600–1757)* (London, 1924), pp. 37 and 208.

[39] *Ain-i-Akbari*, Br. Museum, Add. Mss. No. 7652, fol. 243a, *Haft Alqim*, Bibliotheque Nationale, Paris, MS. Suppl. Pers. 357, fol. 38b (Bengal). Raj Archives, *Akhbarat* dated 3rd *Muharram* 10th R.Y. of Aurangzeb, 25 June AD 1667 (*Subah* Patna) Ibid., no. 1683, dated 29 *Ramzan* 24th R.Y. of Aurangzeb/12 October AD 1681 states that the discovery of silver in a village of *pargana* Badhnaur (*Subah* Malwa) brought an income of rupees one lakh per year. Sujan Rai, pp. 11, 36, 45, 47 and 49, Traill, pp. 157–8 and 188 (copper iron, lead, coarse mica, sandstone and rock crystal in Kumaon). Raper, p. 511 (Dhanpur copper mines were farmed out for rupees four thousand). Long, vol. I, p. 210 (AD 1760) and p. 250 (AD 1761) (export of iron and stone plates from Ballasore to Calcutta). Pennant, vol. I, pp. 18 and 41 (metals and gold in the Punjab), Also, Tod, vol. II, p. 157.

[40] *Ain-i-Akbari*, Br. Museum, MS. 7652, fols. 261a–b. Sujan Rai, p. 75. Salt was extracted in the *subahs* of Gujarat and Thatta, ibid., pp. 58–9.

[41] Ibid., p. 55.

[42] *Ain-i-Akbari*, Br. Museum, Add. Mss. No. 7652, fols. 261a–b.

The state imposed a regular *abwab* (cess) on the production of the salt and had a regular government machinery for its collection.[43] The revenue from salt was usually farmed out to salt contractors.[44] In these regions a large number of the rural population was employed to extract salt and transport it to the local *mandis*. Salt extraction was undertaken by the professional castes. The *alasha-khash* people worked at Kheora and Sindh Sagar Doab, whereas the *nunias* were experts in extracting salt from nitrous soils.[45] Salt formed an extremely important item of the rural trade. It was transported to distant places by Banjaras. Apart from this, there is ample evidence to show that in the seventeenth-eighteenth centuries, animal production was luxurious and cheap.[46] There was plenty of cattle wealth, ghee and butter in all the regions of north India. Butter of high quality was produced in Sindh and Multan, both for home consumption and export to other regions. Agra, being a great commercial centre, imported butter from places along the Jamuna and the Ganges right upto Bihar and Bengal. Thatta (Sindh) bred and exported horses of good quality. During the eighteenth-century, the main commercial classes which operated on an inter-provincial basis were the Multanis, the Banias, Poggyahs (merchants with

[43] Raj Archives, *Akhbarat* dated 28th *Zulqada* 24th R.Y. Aurangzeb/20 Dec. 1680 mentions the appointment of Abdul Qadir as the *amin-i-namk* and *faujdar* of *Shamsabad* (*Subah* Lahore), nos 4449/1, dated 18 *Rabi* I, 23rd R.Y. of Aurangzeb/18 April AD 1680 and no. 1451/1 dated 20 *Rabi* I, 2 R.Y. Aurangzeb, *Rabi* I, 24 R.Y. of Aurangzeb/9 April AD 1681. Sujan Rai, pp. 55, 58, 59 and 75.

[44] *Ain-i-Akbari*, Br. Museum, Add. Mss. No. 7652, fol. 261a–b, States that merchants purchased Sindh Sagar salt at half to two dams a *man* (maund) and paid duty of one rupee for every 17 mans to the state. Also Sujan Rai, ibid.

[45] Sujan Rai, p. 75. The *zamindari* of the salt mountains at Kheora and Sindh Sagar belonged to the Janjohia tribe settled in the *parganas* of Chahak, Nandna, Makhiala etc. The salt mountain was also known as Janjohia after the name of the tribe. For *nunias*, see Lieut, Col. James Skinner, *Tashrih al-Agwam* (AD 1825), Br. Museum, Add. Mss. No. 27, 255, fols. 354–b–356a. Also, Duncan Records, vol. II, pp. 12–13; Tod, vol. II, p. 133.

[46] Linschoten states, 'an Ox or a Cowe is there to be bought for one *Larijin*, which is as much as a halfe a *Gilderne*, sheepe, Hens, and other things after the like rate'. *The Voyage of John Huyghen Van Linschoten of the East Indies from the Old Translation of* 1598, vol. I (tr. Arthur Coke Burnell) (London, 1885), pp. 94–5. Thus, the price of an ox or a cow in Bengal in the late sixteenth century was 7½ annas. For the abundance of cattle, see Sujan Rai, pp. 14–15, 17, 36, 44, 48–9 and 80–2. Hamilton, vol. I, pp. 73 and 75–7 (Thatta). Pennant, vol. II, pp. 239–40 (native horses, tatoos, mules, oxen and buffaloes). According to M.S. Jahani, p. 85, in the seventeenth century, some of the tribes in Sehwan (*subah* Thatta) paid even the land revenue in terms of cattle.

turbans from the north-western regions), Sheikhs, Pathans, Kashmiris, Sannasses, Bettees, Sahukars and Beoparis, all of whom had *dalals* (agents) spread over in the rural and urban centres.[47] The sold their own regional goods and procured goods from other regions on the 'putting out' system.

Goods from one place to another were taken by *kafilas* (caravans) by the wealthy class of merchants known as Banjaras, who maintained supplies between the different parts of the country and to the seaports for export to foreign countries.[48] The Banjara community operated both on short and long-distance routes transporting goods on fixed charges. They specialized in carrying salt, foodgrains, butter and a few other articles. The manori tribe specialized in transporting food-grains and salt. The Banjaras carried armed guards with them. On behalf of the state, the zamindars of the regions were required to ensure their free passage in their respective zamindari jurisdictions.[49] As the Banjara class kept up the supply pipeline from one place to another and hazarded a great risk on the insecure routes, they were well respected in society. Whenever a caravan reached a village or a *qasba*, it was received with great warmth. The Chief Zamindars (*Zamindaran-i Umda*) often offered robes of honour to Banjara chiefs on their safe

[47] Bolts, p. 200 (for merchants operating in Bengal, Bihar and Orissa). Verelst, pp. 113–17. Hodges, p. 80. Pennant, vol. I, p. 38 states that the Banias or merchants and bankers of Multan had settlements in all the commercial towns of India. They sent colonists for a certain number of years to the trading towns of Arabia and Persia. They had establishments from Astrakans to the interior parts of the Mughal Empire. Foster, vol. II, pp. 259–67. Also see N.A.I., Foreign Deptt. Miscellaneous, Sh. 12, pt I, *Short account of the Nouputtee Mahajans of Benaras*, pp. 13–18. The mercantile classes i.e., *sahukars* and *sarafs* etc. settled in Central India and Malwa since the sixteenth century and established their firms and territorial beats for commercial operation, John Malcolm, *A Memoir of Central India Including Malwa etc.* (London, 1823), vol. II, pp. 159–65.

[48] Peter Mundy, *Travels* (London, 1914), vol. II, pp. 95–6. Travernier, *Travels in India* (London, 1926), pp. 32–3. Even in the nineteenth century, Tod (vol. II, p. 132) noticed that salt was transported in *tandas* (caravans) of 40,000 head of oxen from Sambher Lake to distant places. Hamilton, vol. I, pp. 71–5. Raper, pp. 450–4, G.H. Barlow in his letter dated 27 May 1787 to Lord Cornwallis noted that merchants owning goods did not transport them on their own but passed them on to Carriers or *Hundiwalas* who contracted for their transportation and for payment of customs *en route*, Duncan Records, vol. II, pp. 71–5.

[49] For details of the functions of the Zamindars, see my paper on 'Nature of Land Rights in Mughal India' in *The Indian Economic and Social History Review*, 1963, no. I, pp. 10–15. Hamilton, p. 73.

arrival in their territories.[50] Similarly, the other *kafilas* carrying iron, indigo and other industrial goods moved from one place to another. The cost of road transportation was quite high. On an average, for grain transportation it would cost nearly annas 6½ to annas 10 per maund for 100 miles, thereby raising the price of grain per maund by 37.4 per cent to 61.8 per cent (on late-seventeenth-century freight rates and prices).[51] The cost of sugar transportation was nearly half. On long-distances, the imported articles from Kabul to Delhi or Agra would cost nearly four to eight or nine times, depending upon the article, and for grains (wheat etc.) from Agra to Surat nearly four times the original cost. Sugar, iron and salt cost half or even less than foodgrain transportation. As the rural commercial import and export ran mostly on short-distance routes, the transportation charges of foodgrains and other articles were much less. Moreover, the *zamindar* families carried their goods to the local *mandis* nearby in their own bullock carts. All over north India, the indigenous means of land communication were *kacha* roads, which were developed. Ordinarily, there were trees on both sides of the road and regular places of halt were provided. At every stop, there was a *saraia* (a pavilioned resthouse) with trees, wells, tanks and other amenities around it. Sometimes provisions were also available for cattle. On important roads, pillars indicating distance in terms of *karohs* (*a karoh* is about 2 to 2.5 miles) were fixed at regular distances. Bridges were constructed over rivulets and large-scale ferry bridges over the main rivers. Though Sher Shah is well known for having constructed a few new roads,[52]

[50] Hamilton, pp. 72–4.

[51] For the details of the freight charges from Agra to Surat on camel-back, see Hague's letter dated 5th October 1620 in *The English Factories in India* (1618–21), pp. 47, 51 and 73–4. In AD 1656, the *banjaras* carried saltpetre from Agra to Surat and the cost came to nearly Rs 2.7 per *man* (*man-i- Shahjahani*) vide *The English factories in India* (1655–60), p. 63, and also Travernier, p. 29. The rates varied according to the commodities, safety *en route* and the season. For transportation in Kumaon in the eighteenth century, see Traill, pp. 194–5. In the hilly regions, transportation was costlier as goods were carried over the hills by coolies. Merchandise cost 50 per cent to 75 per cent over the above the purchase price in the plains. Also, Purchase, vol. IV, pp. 268–9. Richard Steel and John Crowther (AD 1615) noted that the merchants operating between Lahore and Asfhan (Persia) charged nearly Rs 120–30 per camel load of pepper and spices. This included the cesses charged at various places. A caravan consisted of nearly twelve to fourteen thousand camels and supplied goods to the villages, *qasbas* and the cities that were on the way.

[52] Abbas Sarwani, *Tarikh-i-Sher Shahi*, India Office, MS. No. 218, the 219,

the *kacha* roads interlinking the villages, *qasbas* and cities are known to have existed throughout the medieval period.[53] The local chiefs (*Zamindaran-i Umda*), the other zamindars, the wealthy Hindu merchants and philanthropists, the commercial guilds and temple organizations, all helped in the construction and maintenance of these roads and *sarais*.[54] The usual means of transport were bullock carts. In some regions, for instance the semi desert or hilly tracts, depending on local practice, other means of communication were quite common. Asses, drome daries, horses, mules, hill ponies, goats and porters were used for transportation.[55] Sometimes, the Banjaras followed the known pilgrimage routes.[56] They usually avoided the rainy season. Apart from land routes, goods were also transported through the rivers. As inter-river navigation on a large-scale was well established, goods were transported to long-distances both on a provincial and inter-provincial basis.[57] The goods were transported not only from one main city on

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fol. 109a. *Waqiat-i-Mushtaqi*, Br. Museum. Add. Mss. No. 11, 633, fol. 50a. *Tarikh-i-Daudi* (Aligarh, 1954), p. 217. Sujan Rai, pp. 323–7.

[53] For the maintenance of roads, road pillars, plantation of trees, *Chaubutras* and halting places, *sarais* and bridges on the rivulets and *nalas* during the eighteenth century, see Raper, pp. 452–4, 507 and 558; Hodges, 9–28; S.N. Mukhlis, pp. 13, 16 and 106; Firaqi, p. 35, and Valentia, vol. I, pp. 123–4, 130 and 181.

[54] Purchas, vol. IV, p. 268. Richard Steel and John Crowther (AD 1615) noted the existence of *sarais*, provisions for men and horses etc. after every six or seven *krohs* on the way from Agra to Lahore. *Saris* were built by Kings and rich men in commemoration of their dear ones. Valentia, vol. I, pp. 80–1 and 194. Valentia pays tribute to the Mughals for the Mughals for the proper maintenance of roads, *sarais*, wells etc. but regrets that of late (i.e., in the later part of the eighteenth century), the local zamindars, even when they were paid large allowances were not attending properly to the repair of bridges and roads after the monsoons. Also Traill, pp. 141–2. Long, vol. I, para 12 (Despatch to the Court dated 27 January 1748) and para 31. These despatches suggest that in Bengal it was the traditional duty of the local merchants to look after the repair of roads. As the merchants declined to do it, the East India Company advanced money which was to be repaid out of '*the merchants' accounts current*.'

[55] For details regarding the means of transport see Pennant, vol. I, pp. 35 (camels in Thatta), 99–100 (oxen and hackeries in Gujarat) and 101 (sheep in Goa); Pennant, vol. II, pp. 239–40 (horses, ponies, mules and oxen); Hodges, pp. 31, 34 and 109 (bullocks, hackeries and horses); Valentia, vol. I, pp. 70–1 and 240; S.N. Mukhlis, pp. 9, 39 and 106 (palanquins and carts); Firaqi, pp. 31, 56, 74 and 111 (oxen and camels); and Raper, pp. 642–63 and 529 (hill-ponies called *gunts, char singhas and chha-singhas, Sura gai*, i.e., cow used for carriage and riding).

[56] Raper, pp. 457–8.

[57] *Ain-i-Akbari*, vol. I, (Blochmann), pp. 289–92 and 389. Purchas, vol. IV,

a river bank to another, but the villages and the *qasbas* situated near the rivers equally benefited from this transport system, both for purposes of export and import. The Indus river system connected the rural areas, the main cities of the *Subah* of Lahore, Multan, Sindh and Kashmir. The Jamuna–Ganges river system connected the regions from *Subah* Delhi to Bengal. The Brahmaputra connected Assam and the hilly regions with Bengal. The tributaries and the various waterways attached to the main rivers mostly served the rural areas. There was great commercial traffic through river navigation. This was because of the fact that the cost of maintenance of cargo-boats was much less, as against ox-driven carts, and the freight charges of riverborne goods were much cheaper in comparison to road transportation. On long-distances the cost of road transportation of cotton goods per maund was nearly 66.66 per cent higher than river transportation, but the insurance rates of the former goods were nearly less than a quarter (around 22.72 per cent) as against water insurance.[58] However, the cost of water transport on short-distance routes in the rural regions was very little. This was also a quicker means of transport. Big boats and ships for commercial transportation were built in the provinces of Kashmir, Thatta, Lahore, Allahabad. Bihar, Orissa and Bengal.[59] The seasons were the determining factors for land and river traffic. River navigation was operated by boatmen who belonged to the *mallah* caste.[60] Commercial navigation as well as the boat and shipbuilding

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p. 268 (AD 1615). Sujan Rai, pp. 10, 43–4, 59, 77, and 80. Hamilton, vol. I, pp. 75–7. Hodges, pp. 23–43, gives a detailed description of different types of boats for different purposes, i.e. for passengers and different kinds of goods. A special type of construction and weight was kept up for a boat meant for a particular purpose. Hodges, pp. 38–9, refers to special types of boats constructed for carrying cotton. Twining, pp. 125–8, refers to a journey by boat from Bengal to Monghir, underlining the importance of the Ganges as a cheap and expeditious means of transport. Goods were carried along the Gogra to the Ganges and from thereon transported on larger boats to Calcutta. Valentia, vol. I, pp. 90–222. Firaqi, pp. 74, 79, 122, 127 and 140. Raper, p. 479.

58 For freight rates in respect of riverborne goods in AD 1639 from Agra to Multan and Multan to Thatta see *The English Factories (1637–41)*, pp. 135–6.

59 For details, see *Ain-i-Akbari*, vol. I, (Blochmann), pp. 389, 555 and 563; *Tuzk-i-Jahangiri* (tr. A. Rodgers), p. 298, *Tarikh-i-Tahiri*, Br. Museum, O.R. No. 1685, fols. 58a–b; Peter Mundy, *Travels*, vol, II, pp. 87–8; Thomas Bowrey, *A Geographical Account etc.* (AD 1669–1679) (Cambridge, 1905), p. 225; Sujan Rai, pp. 323–7; and Hodges, pp. 75–6.

60 S.N. Mukhlis, p. 105. The boatmen in various parts of north India were usually Kashmiris.

craftsmanship absorbed a vital section of the rural population. Boats of various kinds and shapes were constructed for commercial purposes. In certain jungles, special kinds of trees were grown for boat wood. Boat bridges were built over the rivers. The Mughal state maintained its own fleet of boats in all riverine regions for the purpose of transporting goods and armies for internal warfare against recalcitrant chiefs and tribes.[61] In fact, in the riverine tracts, it was obligatory on the part of local zamindars who accepted the Mughal sovereignty to keep a fleet of boats for the transportation of royal goods and armies.[62] This was a part of an agreement which entitled the zamindars to a conditional jagir for the maintenance of boats. The same policy was followed by eighteenth-century regional governments towards rural zamindars.

The *bharawala* firms were given the contract for carrying goods for inland, provincial and inter-provincial trade.[63] There was considerable rural banditry, especially in the regions inhabited by the wild or recalcitrant tribes. In order to cover the risk against rural banditry, the *bimawala* (insurance) companies with headquarters in the main cities had agents and small establishments in rural areas, i.e. *mandis, katras* and *qasbas*. These companies insured the transported goods and animals both in the period of peace and trouble at specified rates. However, the insurance of land-transported goods extended to a limited number of articles. Grain, salt, wood and cattle were seldom insured. Only valuable goods like opium, iron, sugar, spices, bullion and jewels were insured. The insurance companies also undertook to pay the custom duties *en route* and the insurance rates covered these

[61] See note 57 above. Also, Mirza Nathan, *Baharistan-i- Ghaibi* (Jahangir's reign) MS. Suppl. Pers. 252, Bibliotheque Nationale, Paris, fols. 2b–4b. For special boats maintained by the English East India Company, see Hodges, pp. 38–9 and Valentia, vol. I, p. 185.

[62] Ibid. S.N. Mukhlis, pp. 12–13, 15, 24, 95–6 and 99–100. The zamindars were to provide boats on the *ghats* of the rivers from Dacca to Calcutta for the crossing of the troops of the English East India Company. Long, vol. I, p. 398.

[63] Sujan Rai, p. 25. The author gives details of the procedure of the *hundi* system. The *sarafs* had their agents at important commercial places, especially within a beat of 200 leagues. The *sarafs* got their commission and the system worked most satisfactorily. Sujan Rai praises the commercial integrity of the Indian set up. Also Raper, pp. 451 and 497. The areas of commercial operation mentioned by Raper extend from Kabul and Kashmir to Bengal. The premium charged by the *sarafs* and their agents on bullion, coinage and exchange on outside coinage ranged from 1½ per cent to 2 per cent.

charges as well. Surprisingly, even the conditions in the troubled regions or the chaotic eighteenth-century political situation did not normally disturb commercial operations or caravan merchants. Recalcitrant tribal chiefs *en route* were more concerned with the exorbitant custom duties they realized, and with the regular supply of goods for their own benefit, than with violent robbery. This, of course, led the *hundiwala* or *bharawala* firms to charge high insurance premium and transportation rates from the owners of merchandise.[64] The *sahukars* kept themselves in touch with political developments in the region that they operated. They were even news reporters to their patron Chief.[65] *Bima* companies insured goods carried by road or riverborne traffic. Though the freight rates of riverborne goods were cheaper, the insurance fee was higher in comparison to road transportation as the risk on river transport was much greater because of the chances of loss to heavily laden cargo-boats. In abnormal times too—a regional revolt for instances—, the insurance rates on the land routes were higher because of the great risk involved. Many a *bima* company kept in their employ carts for road transport and a large number of boats and boatmen, along with armed guard. At the same time, safeguard was taken against carrying cash money in rural areas and on hazardous trade routes. The practice of money payment by means of *hundis* was widely operative in the business circles during the seventeenth-eighteenth centuries. A *hundi* was a written order of promise to pay the amount at sight or after a stipulated period. *Hundis* were drawn by *sarafs* who, after deducting a nominal discount (of nearly 1 per cent) would direct their agents or counterparts at the destination of a trader to make the payment. Lakhs of rupees were remitted like this. *Sarafs* in the *qasbas* had established contacts with *sarafs* in the main cities and ports. Traders carried on much of their business through *hundis*. The *hundis* were drawn by merchants to raise money for the payment of purchased goods. The discount in such cases varied from place to place, ranging between 1 per cent to 10 per cent during the seventeenth-century.[66] *Hundis* which covered the risk of loss or damage of goods in transit were known as *jokhami hundis*. At times, the *hun-*

[64] Malcolm, vol. II, pp. 93–6. In Malwa itself there were insurance companies at Ujjain, Indore and Mandesore operating since generations throughout Malwa, Gujarat, Deccan and North India. Also, Tod, vol. II, p. 501.

[65] N.A.I., *Akhbar* No. 185, O.R. dated 18th *Jamada* II, AH 1211/19 January AD 1797.

[66] Ibid. Tavernier, vol. I, pp. 36–7. *The English Factories (1637–41)*, p. 84.

diwalas, on contract to convey goods at a discount, paid the necessary freight charges and the custom duties levied *en route*.[67] Local *sarafs* and *mahajans* acted as bankers. They advanced loan on interest which amounted to 1 per cent to 4.68 per cent per annum in the *qasbas* and upto 5.8 per cent in the cities.[68] For urgent borrowings, compound interest called *badotra* was charged.[69] In the towns, houses could also be mortgaged. The *qasba sarafs* would also advance loans to agriculturists, but it seems that in some regions prior state permission was necessary for it.[70] The *chaudharis* who belonged to the zamindari class[71] and the temple priests[72] would also advance money on loan. In a big village, it was the *mahajan* (or *zargar*) who was a shopkeeper and also helped in commuting village crops in kind into cash at the scheduled rates for the purposes of revenue assessment.[73] For the latter service, he was entitled to a customary share from the *riaya*. In some regions, the moneylenders (*zargaran*) developed agricultural interests.[74] They would take the land for purposes of development on temporary lease on a sharing basis from revenue-free assigness (*aima*) and *jagirdars*. But this was a malpractice and, as such, was not encouraged by the Mughal government.[75] It does not seem that the village *mahajan* acted as a usurer. It was the zamindar family or the local revenue officials who managed the transportation of grain or

[67] Sujan Rai, p. 25. C.P.C., vol. VIII, pp. 241–2 (in Awadh and the English East India Company's territories). Duncan Records, vol. II, pp. 10–11.

[68] *Bahi of Sarakji*, Saraswati Bhandar Library, Udaipur, documents dated 22nd (dark half) *Phalguna*, V.S. 1838/20 March AD 1778 and 1st (bright half) *Chaitra*, V.S. 1835/29 March AD 1778, fols. 248a–263b.

[69] Ibid. letter dated 14th (bright half) *Kartika*, V.S. AD 1866/1809, no. 1, File No. 4.

[70] Patta dated 3rd (dark half) *Posh*, V.S. 1763/10 January AD 1707 in Old Deposit Records, State Archives Udaipur, no. 163 (3).

[71] Document V.S. 1729/AD 1672–73 in Vidya Pith Collection, Udaipur.

[72] Raper, p. 536. The *mahants* of some of the temples of Ajmer (Rajasthan) are still in possession of documents showing rate of interest on the loans given by them to the laity. The priests of the Badrinath temple lent money to the Rajas of Srinagar (Kumaon) and kept two to three villages as security against the repayment of loan which was never paid and the revenues of the villages remained under constant pledge.

[73] *Siyaqnama*, MS. No. 858, Central Record Office, Hyderabad, fols. 6a–14a and *Dasturulaml* no. 676, fols. 7b–8b.

[74] M.S. Jahani, p. 180. Though this practice can be traced in Bhakkar and the two *sarkars* of Chakarhala and Nasirpur (*subah* Thatta), it may have developed in other regions as well.

[75] Ibid.

commercial crops for sale in a local or *qasba mandi*.[76] In the developed regions, agents of the *beoparis* would purchase the crops or industrial goods at the village level.[77] As a matter of fact, during the seventeenth-eighteenth centuries rural India had a strong middle class, both upper and lower. Apart from the affluent rural zamindar families and dignitaries like *chaudharis, tappadars, desais* (in Gujarat and Deccan), *sardaran* (the landed chiefs), *arbaban* (in Sindh) and *taluqdars* who acted as the landed intermediaries[78] and a few of them also as moneylenders[79] and revenue-free assignees (*armd*), there was the rural commercial class of different types. There were the *sarafs, mahajans*, goldsmiths and jewellers, the merchants (*saudagars* and *beoparis*), the *banjaras* and caravan contractors settled in the rural *mandis, katras* and *qasbas*, who constituted the upper rural middle class. The petty merchants (*beoparis*), the brokers (*dalals*) in the *ganj* and the *mahal* (i.e. market), and the *chaudharis* getting fixed commission on the sale and purchase of goods and merchandise, the manufacturers, the artisans, the technicians and the village *mahajans* (*zargaran*) all formed the lower middle class. A few of the business families, especially the moneylenders, started showing interest in the acquisition of agricultural and even zamindari rights.

During the Mughal age, the state imposed customs duties (*mahsul*) on imported goods and other cesses of various kinds on arts and crafts manufactured by artisans.[80] Cesses imposed on sale and purchase in the rural *qasba* markets covered commodities like articles of food, grains, commercial crops, oil, cloth, skin, medicine, horses, camels, other animals and birds. Under the revenue headings of state income, all these cesses formed a part of *sair-jihat* and *sair-ul-wajah*.[81] Not-

[76] Raj Archives. Misc. Persian Letters, Regd. No. 57, dated AH 1104/AD 1693. Also, Sujan Rai, pp. 43 and 77. Traill, pp. 193–6. The zamindar families themselves were engaged in trade and commerce and set up their *mandis* and marts.

[77] *Khulasatu-s Siyaq* (AD 1703), MS. in N.A.I., pp. 61–3. Traill, pp. 193–6.

[78] For details, see my paper entitled 'Nature of *Dehat-i- Taaluqa* (zamindari villages) and the Evolution of the *Tealuqdari* System during the Mughal Age' in *The Indian Economic and Social History Review*, vol. II, no. 2 (April 1965), pp. 166–77, and vol. II, no. 3, (July 1965), pp. 259–288.

[79] Vide Note 64 above.

[80] *Ain-i-Akbari*, Br. Museum, Add. Mss. No. 7652, fol. 150b. *Ain-i-Akbari*, Hamilton, Berlin, fol. 127a. *Arzdasht-ha-i-Muzaffar Khan*, Br. Museum, Add. Mss. No. 16859, fol. 103b. Raj Archives, *Yaddasht mal-o-Jihat Wa Sair-o-Jihat*, Sohkhar *Pargana*, dated AH 1069/AD 1658–59, and *Pargana* Riwari (*Subah* Delhi). Sujan Rai, pp. 11, 36, 43–4, 56, 59, 75, 79 and 80.

[81] Ibid.

withstanding the fact that Akbar abolished various miscellaneous cesses (*baj, tamgha* and *zakat*),[82] transit duties known as *rahdari* and *zakat* (amounting to 2½ per cent) on the merchandise continued to be collected.[83] Jahangir abolished *zakat* on transit goods, river tolls and some other miscellaneous cesses which were being realized by the jagirdars in their territories.[84] Later, Aurangzeb abolished transit duties (*rahdari*) on gram and vegetables which were being levied per ass-load or cartload or per maund.[85] Levy of some of the cesses (*zakat* and *rahdari*) declared illegal continued in practice in various parts of the empire throughout the seventeenth-eighteenth centuries.[86] However, strict orders were issued by the government to the local officials to refrain from charging *rahdari* from traders moving in the deficit regions.[87] Aurangzeb fixed *mahsul* on merchandise at 2½ per cent *ad valorem* on the goods carried by the Muslim merchants and 5 per cent on the goods of the Hindu merchants.[88] But after his death (AD 1707), the local administration illegally raised the *mahsul* duties to 10 per cent and 15 per cent on the goods of the Muslim and the Hindu merchants respectively.[89] In 1711, Bahadur Shah ordered the com-

[82] *Akbarnama* (tr. by Beveridge) (Calcutta: Bib. Ind., 1897–1921), vol. II, pp. 33–4, and vol. III, p. 437, *Insha-i-Allami*, MS. Orient. Oct. 1140, Berlin, fols. 47a–48a. *Tarikh-i-Akbari* alias *Tarikh-i-Qandahari* (Rampur, 1962), pp. 32–3.

[83] M.S. Jahani, p. 186.

[84] *Jahangir Nama*, MS., Rampur, F. 172, p. 9, and Memoirs of Jahangir. English tr., A. Rogers and Beveridge (London, 1909), pp. 4 and 47, M.S. Jahani, p. 186, states that even though *zakat* was abolished by Jahangir, ½ *seer* of the commodity carried by boat were levied in the riverine tracts in Sehwan.

[85] *Zawabit-i-Alamgiri*, MS. 2336. Central Record Office, Hyderabad, pp. 101–3. *Mirat-i-Alam*, (AD 1666), MS. 51, Muslim University, Aligarh, fols. 138b and 181a. *Ain Bakht*, MS., Muslim University, Aligarh, 84/314, fol. 211b. *Mirat-i-Ahmadi*, vol. I, pp. 258–9.

[86] Khwafi Khan, vol. II, pp. 88–90. Shihabat Din Talish, *Fathiya-i-Ibriya* (AD 1663) (continuation), MS. Or. 589, Bodleian Library, Oxford, fols. 109b–111a. Raj Archives, *Akhbarat*, no. 1495/2, dated 5th *Jamada* 1, 23rd R.Y. Aurangzeb/3 June AD 1680 and no. 1563, dated 14th *Rajab* 23rd R.Y. Aurangzeb/10 August AD 1680, and Maharajas Letters, no. 1066, dated 10th *Ramzan* AH 1116/6 January AD 1705.

[87] The references quoted from *Akhbarat*, Raj Archives, in the preceding note, and *Akhbarat*, dated 25th Safar 13th R.Y. Aurangzeb/14th July AD 1670.

[88] *Mirat-i-Ahmadi*, vol. I, pp. 258–9, 264–5 and 298–9. Khwafi Khan, vol. II, p. 88.

[89] Raj Archives, *Akhbarat* No. 1636, dated 5th R.Y. Bahadur Shah 16th *Ramzan* AH 1123/17 October AD 1711.

pliance of rules framed under Aurangzeb.[90] Seventeenth-century sources reveal that the *mahsul* duties were collected both in cash and kind. In the rural areas, merchants usually paid in kind. It seems that notwithstanding the general royal regulations there were regional schedules (*Dasturulami-i dharat* or *Dastur dharat*) with varying rates on different commodities of production brought into the market.[91] In the riverine areas *mahsul* was levied per boat with specified rate for every kind of merchandise brought by boat.[92] An empty boat was exempted from the payment of *mahsul*. Duties were levied both on the merchants and the customers.[93] In territories far from the central or provincial seats of governance, much depended upon the discretion of the jagirdars and the rates of *mahsul* varied from one jagirdar's tenure to that of another.[94] An honest jagirdar considered it his duty to encourage merchants and artisans to import goods and imposed reasonably light customs, but an unscrupulous jagirdar would charge very high duties.[95] The Mughal state regulated trade and commerce.[96] A jagirdar or a *khalisa* officer would adopt a conciliatory attitude towards fairminded merchants and artisans, but he would impose a penalty in the shape of double duties upon the merchandise of traders and artisans who violated regulations and indulged in blackmarketing.[97] The provincial or local administration fixed prices of foodstuff on a regional scale.[98] The fixing of prices was governed by the principle of local supply and demand. In a region where a particular

[90] Ibid.
[91] M.S. Jahani, p. 172.
[92] Ibid., pp. 146–7, 172, 182 and 186–7. Valentia, vol. I, pp. 217–18 and 225.
[93] Ibid., pp. 172 and 186–7.
[94] Ibid., pp. 146–7, 151, 172 and 186.
[95] Ibid.
[96] Vide Notes 73–8 above. Also, Sujan Rai, p. 11.
[97] M.S. Jahani, p. 145 (territory of Sehwan). Like the division of the agricultural *riaya* and the zamindar classes into *raiyati* (revenue paying) and recalcitrant (*sarkash* or *zortalb*), the author divides the merchants into two classes viz. *raiyati* (revenue paying and law abiding) and *sarkashi*. The latter violated regulations and indulged in black marketing.
[98] *Ain-i-Akbari*, Br. Museum, Add. Mss. No. 7652, fols. 143a–b. M.S. Jahani, pp. 172 and 186. Raj Archives, *Nirkhbazar*, Kohi *Pargana* dated 11th bright half margashirsha V.S. 1785/1 December AD 1728. For the fixation of the local rates, see Raj Archives document dated 25th *Jamada* II, 44th R.Y. Aurangzeb/7 December AD 1700. For the daily reports sent by the *Karori* of the *ganj* to the Central Court, see Raj Archives, Misc. Persian Letters, Regd. No. 355, 25 *Jamada* II, 44th R.Y. Aurangzeb/7 December AD 1700, Ibid., dated 27 *Muharram*, 44th R.Y. Aurangzeb/14 July AD 1700.

commodity was in excess, its import was forbidden and the commodities in excess were diverted to other regions.[99] For drought-striken areas or regions with certain deficit commodities, special facilities were provided to traders. In order to keep down the prices, they were afforded unrestricted movement and were exempted from *mahsul* duties.[100]

The rural commercial set-up in the eighteenth-century practically ran on the same lines as during the seventeenth-century. The presumption that Farrukh Siyar's *Farman*, issued in 1717 to the East India Company, and the intermittently chaotic situation created by foreign invasions (Nadir Shah's in 1739 and Ahmad Shah Abdali's campaigns culminating in the final battle of Panipat in 1761) and internal political disturbances—all ruined Indian cottage industries and commercial life is not fully borne out by the vast contemporary regional evidence available for north India. It is true that the grant of permission to the English to carry on duty-free trade in Bengal and Gujarat on the annual payment of Rs 3000 was a huge revenue loss to the government.[101] But this did not disrupt commercial life in the countryside and urban centres. The seventeenth-eighteenth-century sources are well linked up and give a co-ordinated picture of commercial trends. Of course, some changes occurred in the pattern of production of some commercial crops. The export of indigo and sugar declined owing to competition with the West Indies, but the important regions known for it in the seventeenth-century retained their importance. The regional position of commercial crops and industrial goods was by no means static during the seventeenth-eighteenth centuries. Though the growth of indigo in many provinces was well known even earlier, it acquired real international importance during the seventeenth-century. The cultivation of indigo was extended to the Deccan and East Coast, while Bengal indigo also came into prominence. By the end of the seventeenth-century, indigo was exported even from Bengal.[102] During the

[99] Raj Archives, letter of 5th *Jamada* II, AH 1127/8 June AD 1715 and letter of dated 13th *Rajab* AH 1127/15 July AD 1715.

[100] Raj Archives, *Akhbarat* dated Safar 13th R.Y. Aurangzeb/June-July AD 1670.

[101] *Farman* of Emperor Farrukhsiyar dated 4th *Safar*, 5th R.Y./18 January AD 1717. A copy of the original *Farman* in Persian with translation in Surman's Diary, India Office Records, Home Series, vol. LXIX, pp. 130–1. Also, a photostat copy of the latter in S. Bhattacharya, *The East India Company and the Economy of Bengal from* 1704 *to* 1710 (London, 1954), p. 234.

[102] Twining, p. 86; Calwa, a village on the bank of river Ganges had a

sixteenth-century, paper was manufactured in the *Subahs* of Lahore and Bihar, but by the end of the seventeenth-century it was also manufactured in Awadh.[103] During the sixteenth-century, opium was grown in Rajasthan, Malwa and Allahabad, but in the course of the seventeenth-century its cultivation was extended to the *Subahs* of Bengal and Bihar.[104] During the sixteenth-seventeenth centuries, Bengal had been deficient in salt, which had to be imported from great distances. But during the eighteenth-century Bengal managed to manufacture salt of its own and even exported to the other regions.[105]

During the eighteenth-century, the ruination of the Mughal nobility and the aristocracy resulted in lack of patronage for industrial goods. But this affected the state-owned *karkhanas* located in the cities rather than rural commercial production. Owing to political upheavals and chaotic intermissions, there was considerable reshuffling in the territorial jurisdictions of local chief and zamindar families. Many an upstart zamindar family acquired new rights upon the ashes of old families. But this did not affect the consumption or patronage of the indigenous rural production since the newly established zamindar families patronized the local craftsmanship as the old families had

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flourishing commerce in grain, and near it were some indigo works. Indigo plantations were also run by Englishmen near Hooglie. Valentia, vol. I, p. 231 (Report dated 4 October 1802).

103 Sujan Rai, p. 34. Pennant, vol. II, p. 318, refers to Indian paper used at Calcutta for printing purposes. Apart from paper manufacture in North India at Sialkot, Farrukhabad, Kashmir, Khairpur, Haunpur and Gaya, its manufacture was becoming quite common in Southern India too.

104 Grose, vol. I, p. 122. Pennant, vol. II, p. 228–30. Valentia, vol. I, p. 90.

105 *Haft Aqlim*, Bibliothèque Nationale, Paris, fol. 38b (salt was extracted from grass and vegetation). Verelst, p. 114 (manufacture of salt at certain seasons by manufacturers on putting-out basis) and Appendix, p. 59. Long, vol. I, para 979 (Select Committee, 4 August 1767), states that zamindars were engaged in making salt on their lands with the help of artificers. The merchants procured salt from the zamindars at the village level, and a record of the salt produced was maintained. Also, N.A.I. *Akhbars* (Persian), no. 224 OR 5, 8 (c), dated 30 July 1777, and no. 225 OR 5, 81 (d), dated ibid. However, Sindhi salt was also imported to Bengal in English ships, Akhbar No. 231 OR 5, dated 5 September AD 1777. Verelst, Appendix, p. 59, Duncan Records, vol. II, pp. 12–13. G.H. Barlow noted that despite the fact that Bengal salt was sold in Awadh at the cheap rate of Rs 3½ to Rs 4 per maund, it was not considered of good quality and the Sambhar salt was preferred. Barlow suggested the removal of the custom duties on salt in order to bring down further the price of the Bengal salt so as to procure for it a larger market.

done.[106] The Marathas, Jats, Gujars, Rohillas, Afghans and Sikhs did considerable damage to property and caused great insecurity to life.[107] In the affected regions, mercantile communities suffered and the prices of foodstuffs went up.[108] Cotton and silk-weaving as well as other industries suffered due to the scarcity of raw material. At times, this resulted in the flight of the weaving class.[109] Insecurity regarding the goods in transit led to an increase in the rate of interest on loans (even upto 12 per cent p.a.) and also accounted for the increase in the rate of discount on the *hundis*, the freight charges and the insurance fee for the transportation of goods.[110] All the same, the disruption caused by marauding activities referred to above was temporary in nature and affected limited regions. Once the inroads subsided and they were successful in establishing their own zamindaries and chieftainships, they were equally interested in restoring law and order and normal commercial life in their respective territories. However, eighteenth-century sources highlight other disquieting features which had crept into commercial life. The worst aspect was a lack of enforcement of official Mughal practices in the regulation of trade and commerce. In

[106] The palaces of Patiala, Alwar and Bharatpur built during the eighteenth century contain numerous works of art and craftsmanship.

[107] S.N. Mukhlis, pp. 69 and 82 (damage done by the Rohillas). Verelst, pp. 125–7 and Appendix, p. 111 (Rohillas and Sikhs). Raper, pp. 453–4. Poll tax on travellers attending religious fairs and the heavy duties levied on cattle and merchandise by the Marathas. C.P.C., vol. VIII, para 234, p. 97 (pillage by the Sikhs, Mewatis and Marathas). *Firaqi*, pp. 33, 48, 50, 64–5, 72–3, 90–1, 117, 121, 124, 126–7, 135 and 142 (Sikhs, Gujars, Marathas, Jats and Rohillas). N.A.I., *Akhbars* Nos 186 OR 186, dated 6th *Rajab* AH 1211/20 January 1797; no. 187 OR 61 dated 11th *Rajab* AH 1211/22 January 1797; no. 189 OR 63 dated 27th *Jamada* II/22 January 1797 (Sikhs); no. 195 OR 84, dated 28 January 1797 (Gujars); and no. 91 OR 418 dated 9th *Zulqada* AH 1201/1 September 1787 (Rohillas).

[108] N.A.I. *Akbar* No. 95 OR 422 dated 10th *zulqada* AH 1201/1 September 1787 (rise in price due to pillage by the Gujars). Twining, p. 100. Pennant, vol. II, p. 273. Foster, vol. I, p. 261. Raper, p. 953. Grose, pp. 78–93. Grose comments that due to the atrocities of the Marathas, even the Hindu merchants especially the *Banyas* and Brahmins, preferred to live under a Moorish Government or any other Government. Surat was crowded with Hindu merchants and mechanics.

[109] Long, para 87, p. 32. The Despatch to the Court, 18 September 1752, states that the weavers and washermen ran away from Jugdea in Bengal.

[110] *Bahi of Sanakji*, Saraswati Mahal Library, Udaipur, nos 260, 264, 267–8, dated 2nd dark half of *Phalguna*, V.S. 1834/20 March AD 1778 and 1st bright half of *Chitra*, V.S. 1835/29 March AD 1778 mention the rate of interest at 1 per cent or a *takka* per rupee per month. Also, Bolts, pp. 157–8, and Raper, pp. 451–2.

Mughal territories and across regional governments, the imposition of exorbitant cess (*abwab*) on merchandise in transit was a growing phenomenon.[111] The local administration imposed *rahdari* and also enhanced the rate of *mahsul* on goods. Some regional governments framed their own trade regulations and levied exorbitant *mahsul* duties.[112] The minting of coins by independent rulers led to a multiplicity in the currency system.[113] At times, Baniyas established their own mints.[114] The currency of spurious coins in the markets adversely affected trade and industry.[115] Sometimes, merchants were exposed to vexatious demands due to the multiplicity of customs houses within a single province. At times the merchants, in turns violated trade regulations. In regions where no strong control was exerted over them, they unduly enhanced the prices of their goods; local weavers and artisans were unable to get foodstuffs at reasonable prices.[116] In Bengal, Bihar and Orissa, English East India Company officials resorted to the enforcement of the 'putting out' system in a high-handed manner which harmed the local rural trade.[117] This equally contributed to decline in the quality of the manufactured goods. The monopolistic attitude of the East India Company, which ruled out competition with other traders (even Indian merchants) left artisans and craftsmen at the mercy of agents (*gumashtas*) of the Company. The middlemen (*dalals*) and pykes were often chastised for not procuring goods at the stipulated rates. Wherever possible, the *dalals* themselves resorted to

[111] Khwafi Khan, vol. II, p. 90. Long, vol. I, p. 27 (Consultations dated 30 May 1751) and p. 119 (letter to the Court 27 Februay 1758). Duncan Records, vol. II, pp. 25–31. Grose, vol. I, pp. 99–100. Foster, vol. I, pp. 191–2.

[112] Ibid., C.P.C., vol. VIII, pp. 175–6, letter dated 31 May AD 1788 (Benaras, Bengal and Bihar); pp. 241–3, letter dated 3 August 1788 (Awadh, Bengal, Bihar and Orissa); and pp. 85–6, letter dated 29 February 1788, Raper, pp. 453–4. Foster, vol. I, pp. 268 and 347–8 and vol. II, p. 88. Duncan Records, vol. II, pp. 16 and 19.

[113] Long, vol. I, pp. 211–12 (proceedings dated 14 April AD 1760), and p. 242. C.P.C., vol. VIII, p. 29. Bolts, pp. 157–8 and 203–6. Foster, vol. II, p. 38, Hamilton, vol. II, p. 497.

[114] Bolts, pp. 203–6.

[115] Ibid., pp. 158 and 206. Grose, vol. I, pp. 282–3. G.W. Forrest, *Selections from Letters etc.* (London, 1870), vol. Ii, pp. 101–2.

[116] Khwafi Khan, vol. II, pp. 395–6. Long, vol. I, p. 40 (Consultation, 11 December 1752) and p. 57 (Consultation, 24 April 1755).

[117] Long, vol. I, p. 250 (January 1761) and pp. 276–7 (Proceedings 7 June 1762). Bolts, pp. 73–4 and 190–200. Verelst, pp. 58 and 84–90, Duncan Records, vol. Ii, pp. 3–9.

corrupt practice, paying much less than was due to the manufacturers, and keeping a high margin of profit on sale of articles to customers. This adversely effected the Indian silk and cotton industries in these regions.

All these features marked a definite deterioration in the commercial life of India, in comparison to conditions in the seventeenth-century. It was more marked in the second half of the eighteenth-century than in the earlier phase. However, this was by no means a uniform phenomenon, as the extent of normality or decline in rural commercial transactions varied in the different regions of north India. Commercial decline was confined only certain regions. Moreover, a greater strain was felt by the urban commercial centres and inter-provincial trade than by people engaged in to rural commercial life. The rural commercial output and its set-up for import-export remained integrated in Mughal territories, and various other independent or semi-independent regional governments under the chief zamindars (rajas etc.).[118] Even though these abuses operated in the rural areas of these regions in varying degrees, they remain only incidental and secondary in the decline of rural commercial life. The real causes which led to the decline of cottage industries and upset the commercial pattern of rural society of India were the Industrial Revolution in Europe, and the reaction of industrialized European society upon Indian trade and commerce during the later decades of the eighteenth-century and nineteenth-centuries. Even before the industrial era, the English government was particular to protect its cotton industry at home. By Acts of British Parliament in 1700, 1720 and 1765, the use of printed or dyed calicoes was prohibited, and the British government imposed high duties on foreign ships which exported Indian cotton and silk manufactures.[119] After the Industrial Revolution, England was keen to sell its own manufactured industrial goods. This greatly affected the demand for Indian goods in European markets.

Apart from this, after the introduction of the Indian railways

[118] Traill, pp. 146–7, 149–50 and appendix pp. 192–6. C.P.C., vol. VIII, pp. 241–3 (letter dated 3 August 1788). Also, Notes 35–47, 53, 59a and 95–8.

[119] Taylor, *Letters on India etc.* (London, 1800), p. 164. William Milburn, *Oriental Commerce*, vol. II (London, 1858), pp. 250–2. D. Macpherson, *The History of European Commerce with India* (London, 1812), p. 282. Balkrishna *Commercial Relations between England and India*, 1600–1757 (London, 1924), pp. 308–10; N.K. Mishra, *The British Parliamentary Act of 1700 and The Textile Industry of India* (Poona: Proceedings of the Indian History Congress, 1963), pp. 554–61.

during the nineteenth-century, the changed pattern in the means of communication equally affected the Indian rural commercial set-up. Though the impact of all these factors upon the Indian rural economy is undeniable, it is still doubtful if rural commercial production and the cottage industries were ever strangulated. The argument of an ever-increasing decline of cottage industries and handicrafts during the course of the eighteenth and nineteenth centuries has been mostly exaggerated. Trade with neighbouring countries, especially Central Asia and the Middle Asian countries, is a continued feature throughout the seventeenth, eighteenth and nineteenth centuries.[120] The misuse of English political authority in India as a part of British colonial policy and the competition of the Indian trade with the French and the Dutch trade in South East Asia[121] did affect Indian foreign trade, but it gave a new trend to the internal trade. The local rural commercial production found new avenues in provincial markets within the subcontinent, which greatly compensated the comparative loss of foreign trade with respect to handicrafts and cottage industries.[122] Notwithstanding the harassment caused to artisans during the eighteenth-century in Bengal, Bihar and Orissa by officials of the English East India Company, as well as the tussle between local merchants and the agents (*gumashtas*) of the East India Company for the priority of claims over the producing class and consuming markets, British policy became more practical for the sustenance and regulation of Indian subcontinental trade. With the gradual consolidation of British rule in India during the course of the nineteenth-century, internal trading rules were enforced for the regulation of local and inter-provincial trade and commerce, which helped rural commercial trade to recover from the strains it had suffered during the chaotic period of the eighteenth-century.[123]

120 Raper, p. 530. Mir Ahmad, *Tawa ;kh-i-Kalan Kashmir* (AD 1834–37). MS. M/829, State Archives, Patiala.

121 Long, vol. I, p. 119 (Letter to the Court, 27 February 1758).

122 See Notes 5–7, 29–30, 38, 44, 58, 95–8, and 110–112.

123 For example, see B.H. Baden Powell, *Economic Products of the Punjab* (Lahore, 1872), and J.L. Kipling's, 'The Industries of the Punjab' in *The Journal of Indian Art*, no. 20, October 1887, London, pp. 25–40.

Abbreviations Used in the Notes

Ain-i-Akbari (Tr. Blochmann)	*Ain-i-Akbari* (Tr. by Blochmann), vol. I.
Bolts	William Bolts, *Considerations on Indian Affairs etc.* (London, 1772).
Br. Museum, Add. Mss.	British Museum, *Additional Manuscripts*.
C.P.C.	*The Calendar of Persian Correspondence*, National Archives of India, New Delhi.
Duncan Records	A. Shakespear, *Selections from the Duncan Records*, 2 vols (Benaras, 1873).
Firaqi	*Waqai-Alam-Shahi by* Kanwar Prem Kishore Firaqi (ed. Imtiaz Ali Khan Arshi) (Rampur, 1949).
Foster	George Foster, *A Journey from Bengal to England etc.* (London, 1798).
Grose	John Henry Grose, *Voyage to the East Indies etc.* (London, 1766).
Hamilton	Alexander Hamilton, *New Account of the East Indies etc.*, 2 vols (London, 1930).
Hodges	William Hodges, *Travels in India During the Years, 1780–83* (London, 1793).
Khwafi	Khwafi Khan, *Muntakhabal Lubab* (AD 1731). Persian Text, Bib. Ind. Calcutta, AD 1860–1874.
Long	John Long, *Selections from unpublished Records of Government for the years 1748–67 relating mainly to the social condition of Bengal with a map of Calcutta in 1784*, vol. I (Calcutta, 1869).
Mirat-i-Ahmadi	Ali Muhammad Khan, *Mirat-i-Ahmadi* (AD 1761). Persian text. 2 Volumes and a Supplement. Baroda, 1927–28 and AD 1930.
M.S. Jahani	*Mahzar-i-Shah Jahani* (AD 1634) (ed. by Yusuf Mirak) (Karachi, 1961).
N.A.I.	National Archives of India, New Delhi.
Pennant	Pennant, *A View of Hindoostan, Eastern Hindustan*, 2 vols (London, 1798).

Purchas	Samuel Purchas, *Purchas, His Pilgrimes*, Hakluytus Posthumus, IV (Glasgow, 1905).
Raj Archives	Rajasthan Archives, Jaipur (now transferred to Bikaner).
Raper	Capt. F.V. Raper, *Narrative of a Survey for the Purpose of Discovering the Sources of the Ganges—Brief Survey of the Ganges*, Asiatic Researches, XI (Calcutta, 1810).
S.N. Mukhlis	*Safar Nama-i-Anand Ram Mukhlis* AH 1164/AD 1751 (ed. Sayyid Azhar Ali) (Rampur, 1946).
Sujan Rai	Sujan Rai Bhandari, *Khulasatu-i-Tawarikh* (AD 1695–96) (ed. by Zafar Hasan) (Delhi, 1918).
Tod	James Tod, *Annals and Antiquities of Rajasthan*, 2 vols (London, 1914).
Traill	G.W. Traill's, *Statistical Sketches of Kumaon*, Asiatic Researches, vol. XVI (Calcutta, 1928).
Twining	Thomas Twining, *Travels in India etc.* (London, 1893).
Valentia	George Viscount Valentia, *Voyages and travels in Indian, Ceylon, etc. (1802–6)*, 3 vols (London, 1809).
Verelst	Harry Verelst, *A View of the Rise, Progress and the Present State of the English Government in Bengal* (London, 1772).
Waqiyat-i-Baburi	*Waqiyat-i-Baburi*, Bibliothèque Nationale, Ms. Paris. Suppl. Pers. 260, Fol. 360a-Babar's Memoirs, Beveridge, III.

Chapter Eight

Markets and Traders in India during the Seventeenth and Eighteenth Centuries*

K.N. CHAUDHURI

In the development of long-distance trade the subcontinent of India has played a major role throughout history. Within its own geographical or political frontiers an active interregional commerce made it possible to sustain a fairly advanced form of economic specialization. This in its turn enabled the local political authorities or imperial governments to maintain public expenditure at a high level, drawing the envious attention of warrior rulers living in less fortunate circumstances. To Jean Baptiste Tavernier and many other contemporary European observers, the Mughal Emperor was the most powerful and the richest monarch in Asia. He was elevated to this status by the wealth, fertility, and the populousness of the territories over which his rule extended.[1] The productive capacity of Hindustan was commented upon by Babur himself, who described his latter years in Kabul as a 'harsh school of poverty'.[2] Within three generations the descendants of the dispossessed Turani prince had established in India an imperial and economic order which probably surpassed anything the country had previously experienced. There is no question that the Mughal

* For a more detailed discussion and treatment of the ideas presented in this paper, see the author's work, *The Trading World of Asia and the English East India Company, 1660–1760*, Cambridge University Press, 1978.

[1] *Travels in India by Jean-Baptiste Tavernier*, ed. V. Ball and W. Crooke, 2 vols (London, 1925), I, p. 260.

[2] *The Babur-nama in English: Memoirs of Babur*, translated by A.S. Beveridge, 2 vols (London, 1921), II, p. 525.

political and military strength in India largely rested on its agricultural wealth. In 1624 Pietro della Valle wrote in his travel diary while he was in Goa that the king of India was an exceedingly rich prince whose income came mainly from his lands and not from the sea ports. The naval superiority which the maritime nations of Europe were able to exercise in Asia lost a great deal of its strategic advantage in the eyes of della Valle because of Mughal indifference to trade.[3]

However, there is ample evidence to show that the customs revenue derived by the central and provincial governments from seaborne or inland trade was by no means negligible.[4] The meticulous care with which imperial officials in Surat, Hugli, or Balasore recorded in writing the exports and imports of the respective ports is only one indication among many of the Mughal administrative preoccupations with matters of trade.[5] The high degree of centralization achieved by the Mughals in government had a strong financial and monetary base, which was fostered by a long tradition of banking and commercial exchange. It is inconceivable that the state machinery dealing with even land revenue could have functioned properly without financial intermediaries and an active market mechanism. The loss of Mughal state papers and lack of private commercial records has meant that much of this interaction between trading activities and government policy is hidden from our knowledge. But there is little doubt that the Indian economy of this period contained a prosperous and enterprising commercial community responsible for the distribution and marketing of both the products of agriculture as well as industrial handicrafts. Although direct evidence is often lacking, some light can be thrown on the nature and character of India's foreign and internal trade from the historical information contained to the papers of the European chartered companies. In setting up their trading organization in India the European companies made extensive use of the existing indigenous commercial institutions, and their relationships with the Indian merchants provide important insights into different forms of economic behaviour.

[3] *The Travels of Pietro della Valle in India*, ed. E. Grey, 2 vols (London, 1892), II, pp. 417–19.

[4] In 1716 John Surman was able to examine the Surat Customs Registers in Delhi and he was surprised to discover just how much the English private traders paid to the Imperial exchequer. See Bengal Public Consultations, 14 March 1716, vol. 3, p: 177.

[5] These copies will be found in Koloniale Archieven Oost-Indie, Algemeen Rijksarchief, the Hague.

While there are many studies that deal with a descriptive account of Indian trade, few attempt to provide an analytical treatment of its form and content. A theoretical analysis of Indian markets and traders in the pre-modern period must begin by raising a number of fundamental questions. We are concerned here with mainly non-local trade, and a critical assumption in the analysis of its character is the conceptual and spatial separation of the buying and selling markets. The linkage between these can take a number of different institutional forms which are determined by local conditions and practices. It is not a necessary condition of economic exchanges between widely separated markets that their character should be identical or even similar. Trade between unequal partners, between societies with different rates of growth and development, is a common historical phenomenon. But such differences call for a considerable flexibility in commercial techniques on the part of merchants and traders whose task it is to connect the buying and selling markets. The appearance of north European traders in India during the early years of the seventeenth century brought a new dimension to the contemporary commercial practices. For they were organized on the basis of a bureaucratic institution acting as a central distribution agency in the selling markets of Europe. But the markets in which the Dutch and the English East India Companies made their purchases were still the traditional ones with a large number of individual merchants offering their services to the customers and trading in commodities that were the products of peasant and artisan labour. Even in the European selling markets, once the East India goods had been sold in the annual auctions, their distribution and retail sales were in the hands of non-corporate traders. The economic innovation which the joint-stock organization of the East India Companies represented lay in the latter's attempt to impose some form of unified decision-making on markets that were traditionally decentralized and fragmented.

If the pre-modern trade of India or Asia lacked the continuity and the regularity later created by the Industrial Revolution, we have to determine still the degree to which markets and traders were influenced in their commercial decisions by uncertainties and an incapacity of consumers to absorb the economic surplus of the exporting areas on any substantial scale. But, before the investigation of this problem is taken any further, we need a definition of the term market. Theories on markets can be arranged into several categories, all of which incorporate the necessary assumption that the term involves an

exchange of some kind. A market may be defined first of all as a form of economic behaviour. It is also a locus in space where the physical process of exchange takes place. A corollary of the spatial definition of the market is its dynamic features. Time is an important second dimension in its measurement. Finally, a market can be taken as a sociological phenomenon, in which various social groups perform differentiated functions. The relationships between political rulers and merchants, between merchants and brokers, or the pedlars and house-holders, all fall within the last category and such relationships, apart from raising purely economic issues, also involve wider questions of power and social stratifications. The most explicit examination of these ideas on trade is to be found in the paradigm propounded by Karl Polanyi.[6] He made a fundamental distinction between trade which was conducted through economic calculations and that which was an expression of political or social will. As an institutional definition trade was a method of acquiring goods which were not available locally. But Polanyi defined market trade as a double movement of goods in opposite directions passing through a supply-demand price mechanism. The movement was regulated by prices, and these in turn were the function of the market. But institutional trading was independent of such a market. The chief, or the king who acted for the community, acquired the goods through a command system and distributed them according to customary practices. The whole process of exchange included considerable ceremonial and ritualistic elements. Out of these ideas came Polanyi's well-known concept of market-less trading.[7]

It is clear that the long-distance commerce of Mughal India, with which we are concerned here, falls in the category of market trading. But it is equally evident that the operation of the price system in premodern markets may be highly imperfect, and it is necessary to examine the historical evidence carefully to see how the market mechanism was differentiated by several gradations of economic behaviour. Even in this area of study historical theories are not lacking.

[6] See Karl Polanyi, C.M. Arensberg, and H.W. Pearson, eds., *Trade and Markets in Early Empires* (New York, 1957); and Polanyi, 'Traders and Trade', in J.A. Sabloff and C.C. Lamberg-Karlovsky, eds., *Ancient Civilization and Trade* (New Mexico: Albuquerque, 1975).

[7] For a discussion of Polanyi's work, see G. Dalton, 'Karl Polanyi's Analysis of Long-Distance Trade and his Wider Paradigm', in Sabloff and Lamberg-Karlovsky, *Ancient Civilization and Trade*.

In his classic description of the trading world of Asia in the early seventeenth century, J.C. van Leur stressed the function performed by the small trader and the pedlar in the distribution of commercial goods.[8] Although he carefully distinguished between small peddling trader and large wholesale merchants to be found in India and China during this period, his sociological scheme of Asian trade was characterized by extreme fragmentation, multiplicity of markets, and unstable prices. To support his view of a highly volatile market, van Leur quoted a series of extracts from the records of the Dutch East India Company. The following example is a typical one. In 1621 the Dutch factor in Mocha reported that 'the big ship that comes each year from Suez has not come yet, that is long overdue and is a great loss for all the ships lying here, for by lack of buyers they have to give their goods so cheap that they cannot stand it . . . At the moment there are nothing but sellers here and each one seeks only to get rid of what he has in order to leave here with the monsoon and not stay over . . . They cannot collect the debts they have, however diligently they may try; it all is waiting for the coming of the ships from above'.[9] The point which van Leur draws from the above passage is of course the disruption in the normal trading activities of the port due to the non-arrival of the Suez ships. It is perfectly true that the letters written by both the Dutch and the English merchants in later years show that the entrepot trade of this great Red Sea port and the price of coffee, its sole export, were strongly influenced by the timing of Suez and Jedda fleets.[10] These ships brought large quantities of bullion to Mocha, and a failure in the supply of this essential lubricant to trade could have serious repercussions stretching out to Surat and the weaving towns of Gujarat. But the question to which the historian must address himself is whether the cause-and-effect relationship between money supply and the velocity of economic transactions was unique to Asia or India as a manifest expression of its primitive, small, and decentralized markets. The answer must surely be in the negative, and if van Leur had searched the Dutch records describing the European markets for the Company's products he would have found no difficulty in identifying similar situations.

[8] J.C. van Leur, *Indonesian Trade and Society: Essays in Asian Social and Economic History* (The Hague, 1955), p. 132.

[9] Ibid., p. 217.

[10] For an example, see India Office Records, Surat Factory to the Court of Committees, 30 November 1683, Original Correspondence, vol. 43, no. 5001, p. 4.

The truth is that all pre-modern trade whether in Europe or Asia was painfully dependent on a smooth flow of bullion supplies which determined to a great extent the level of monetary circulation. The commodity market, on the other hand, was particularly susceptible to rapid fluctuations in prices due to the irregularities in supplies. The effect of a severe credit crisis on the personal liquidity of merchants can be seen very clearly from the English East India Company's account of the crisis following the collapse of the South Sea Company in 1720. In February 1721 the Court of Directors informed the Madras Council, 'When we took up in August last and large quantity of shipping before mentioned, it was upon the prospect of our Trade being carried on with its usual currency, but some little time after that a General Stagnation of Credit overspread all these parts of Europe. Holland, France, Spain and Italy, as well as Britain have felt the sad effects of it, each country affecting the others, insomuch that bullion was not to be gotten, though we thought we had made a sufficient provision for it. The merchants abroad were afraid of parting with their ready money (for bullion is such). This was heightened by many and very eminent merchants being run upon beyond what they were able to answer, having their effects abroad, and the same evil has befallen several . . . bankers in this and the neighbouring countries'.[11] Even in the institutionalized market for East India goods in London a single ship was capable of making a considerable difference in prices. In 1722 one of the Company's homeward-bound ships, the *Addison*, was lost at sea, and the Directors wrote to their Bengal officials that had the news of the shipwreck arrived before the auction sales were held, prices would have risen to the point at which the entire loss could have been recovered.[12]

The imperfect knowledge which we possess on the structure of Asian markets may lead us to conclude, if we are not careful, that the ordinary entrepreneurial character of this trade was a sum of peddling activities. The views of van Leur have recently been revived by Niels Steensgaard in his study of the overland caravan trade in the early seventeenth century. He admits that the peddling trade could make use of fairly sophisticated commercial methods, but he concludes, 'Nevertheless, the ordinary entrepreneur operates on the pedlar level,

[11] India Office Records, Despatch Book, 24 February 1721, vol. 100, para 77, pp. 520–1.

[12] India Office Records, Despatch Book, 21 December 1722, vol. 101, para 17, p. 367.

and there is nothing in the sources to indicate the existence of comprehensive coordinated organizations—of an Armenian, Turkish or Persian version of a Fugger, Cranfield or Tripp'.[13] The operations of the Middle Eastern merchants have not been studied in sufficient depth from the original sources, Armenian, Turkish, or Persian, for us to believe uncritically in such a categorical statement. In 1697 the English East India Company described the Armenians who at that time traded between Europe and the Levant as 'the most ancient merchants of the world' and their trade in woollen cloth as one which 'they have been possessed of ever since any cloth was made in the world'.[14] Is it possible to believe that men to whom such a homage was paid by one of the largest business institutions of the time conducted their trade on a level no higher that of pedlars? Steensgaard has referred to the detailed journal of the Armenian merchant, Hovhannes, who travelled in the 1680s all the way from Isfahan, through India to Lhasa, and his business transactions reveal very small-scale sales and purchases.[15] For India there is Tavernier's description of the itinerant trade of the grain dealers, the *Banjaras*, travelling with upward of 10,000 pack oxen. They carried grain and salt right across the country and lived a completely nomadic life.[16] But even the evidence from the records of the European trading companies would prove that the existence of the *Banjaras* or men like Hovhannes does not justify the conclusion that the interregional trade of India or the Middle East was conducted solely at the peddling level. The actual structure of the Asian markets and trade, as we hope to demonstrate, was much more complex.

The first point which must be noted in any analysis of the pre-Industrial Revolution market is its small scale and dimensions. There was a considerable element of speculation in it also, because large differences in prices between one regional market and another gave the merchants the opportunities for making large profits and compensated for a high degree of risk. As the cost of transport, even in the

[13] N. Steensgaard, *Carracks, Caravans, and Companies: The Structural Crisis in the European-Asian Trade in the Early Seventeenth Century* (Copenhagen, 1972), p. 30.

[14] India Office Records, Despatch Book, 1 September 1697, vol. 92, para 8, p. 608.

[15] L. Khachikian, 'Le registre d'un marchand Arménien en Perse, en Inde et au Tibet (1682–1693)', *Annales, Economies, Sociétés, Civilizations*, 22 (1967), 231–78.

[16] Tavernier, *Travels in India*, I, pp. 32–3.

case of high-valued goods, was a substantial item in total variable costs, a certain margin of price differentials was a necessary condition of trade. If we start with the assumption that the pre-modern trade was independent of the economies of scale and that instability of prices was a feature of the best regulated markets, it is not difficult to understand the reason for the coexistence of small traders and pedlars with merchants whose wealth and power compared favourably with territorial princes. It is possible that the small trader never really accounted for the cost of his own labour. Theoretically, he was the commercial equivalent of the peasant farmer. In India the true pedlars were those who were engaged in mostly local trade. They went from village to village with their pack bullocks, buying pieces of cloth from individual weavers and retailing their were in the same fashion.[17] The Armenian traders, on the other hand, were in quite a different category. They were a group of highly-skilled arbitrage dealers who were forced through historical circumstances to develop very flexible and geographically mobile forms of commerce. The Armenians were prepared to deal in any commodity that offered the prospect of making a profit, and their uncertain political and national status bred a sense of ethnic solidarity that was independent of the place of residence. An ability to measure the risks of overland trade and a readiness to vary the size of commercial transactions were the special services which the Armenians brought to the trading world of the Middle East, India, and even Europe. But there were, among them, also merchants whose status was equal to that of the most successful merchant of London and Amsterdam. In the early eighteenth century Khwaja Surhaud of Bengal enjoyed so much power and influence that he even interceded on behalf of the East India Company at the Imperial Court in Delhi. At the time of the Revolution of Plassey, one of the most eminent merchants in Bengal was another Armenian, Khwaja Wazid, who was given the title of *Fakhr-ut-tujar* or the chief of the merchants. As the head of the Dutch Factory reported in 1755 he was truly the maintainer of the riches of the rulers in the court of Nawab Alivardi Khan. He gave the Nawab rich presents willingly rather than under compulsion and the Dutch Chief recommended that Wazid's friendship should be cultivated as he could prove very useful to the Company.[18]

[17] India Office Records, Fort St. George Factory to the Court of Committees, 30 November 1676, Original Correspondence, vol. 37, no. 4215, para 17, p. 11.

[18] Memorie of Jan Kersseboom, 14 February 1755 (The Hague: Koloniale Archieven, 2791).

The European trading companies traditionally dealt with merchants in India who were able to handle a large volume of trade. In the 1660s and 1670s, for example, the records of the English Company contain numerous references to the great South Indian merchant, Cassa Verona; he was the only Indian partner of the Company whose death was commemorated with the firing of 30 gun salutes.[19] In Surat there was Virji Vora whose reputation was even more legendary. The concentration of economic power in his hands had become so great by 1636 that the English Council felt obliged to point out the if Virji Vora wished to deal in a particular line of goods no other merchant in Surat would be bold enough to challenge him. Even the Company's broker who had the least dependency on his good will refused to come to the English Factory with alternative buyers for the Company's imports.[20] Two years previously, the fine coral was sold to a merchant other than Virji Vora, because the Factory had thought it opportune to try and break the great merchant's monopoly of the market. But the purchaser of the coral in the end did not dare to collect it and the consignment remained languishing in the Company's warehouse.[21] This was a situation in which the market for the Company's export goods was completely predictable as a result of the monopolistic control exercised by a single merchant. Steensgaard has summarized in his work the views of P.W. Klein on the role of monopoly in the Dutch market. As he puts it, in Klein's opinion 'the risks attached to stock formation would discourage the entrepreneurs under the non-transparent conditions of the market if they did not have the possibility of controlling the market by means of a monopoly or a quasi-monopoly. The monopolistic tendencies reduced the risk and thereby the transaction costs, and thus, far from being disturbing elements, they fulfilled an important function in the concrete, pre-industrial market'.[22] If the operation of the monopolistic market forces in Holland was an advance over primitive market forms, its presence in Surat as exemplified by Virji Vora's business dealings seemed to have been unwelcome to European merchants familiar with these higher commercial techniques. It should not be thought that a man like Virji Vora

[19] *Records of Fort St. George: The Diary and Consultation Book of 1680–81*, 28 March 1680, p. 20.

[20] *The English Factories in India 1634–1636*, 28 April 1636, p. 218.

[21] Ibid., 8 April 1634, p. 24.

[22] Steensgaard, *Carracks, Caravans, and Companies*, p. 15; P.W. Klein, *De Trippen en de 17e eeuw* (Assen, 1965).

was exceptional in the commercial life of Surat. Although the family lost its pre-eminence after his death, the business enterprise founded by Abdul Gafur in the last quarter of the seventeenth century lasted for more than four generations. Alexander Hamilton, who knew Surat and its merchants intimately at around the turn of the century, specially singled him out in his *A New Account of the East Indies*. 'Abdul Gafour, a Mahometan that I was acquainted with,' Hamilton wrote, 'drove a trade equal to the English East India Company, for I have known him fit out in a year, above twenty sail of ships, between 300 and 800 tons, and none of them had less of his own stock than 10,000 pounds and some of them had 25,000; and, after that foreign stock was sent away, he behoved to have a much more of an inland stock for the following year's market'.[23] Even in 1742 his great-grandson, Mulla Fakir-uddin, was described as a great *saudagar* of the city.[24] To these examples, it is possible to add others, and a proper examination of the sources may reveal that Asian business houses headed by merchants such as the members of the Gafur family were not after all very different from a Fugger or a Cranfield able to undertake comprehensive and co-ordinated commercial ventures.

If the emphasis placed by Steensgaard on the pedlar is an exaggeration in the context of contemporary Asian trade, the same criticism attaches to his acceptance of van Leur's second characterization of Asia's international commerce: the existence of 'as many markets as there were towns and ports, each one with its own money, its own weights, its own measures, its own customs'.[25] Of course the multiplicity of money and weights, and even government fiscal regulations, was a constant feature of pre-modern trade. The English Channel marked the separation of two distinct systems of commercial institutions, those of France and England. The provincial mints of the United Republic of Holland each issued different types of coins. The merchant's almanac with long conversion tables for a multitude of separate currencies was an indispensable business tool of every reputable foreign exchange dealer in Europe. In their weekly correspondence with the English East India Company, the Amsterdam banking and merchant firm of George and Isaac Clifford regularly included the rates

[23] Alexander Hamilton, *A New Account of the East Indies*, ed. W. Foster, 2 vols (London, 1930), I, p. 89.

[24] India Office Records, Factory Records Surat, 29–30 September 1742, vol. 27, pp. 34–5.

[25] van Leur, *Indonesian Trade and Society*, p. 214.

of exchange between half a dozen different European monetary units.[26] The independence of economic institutions between trading centres does not necessarily point to complete market autarchy, otherwise trade would not have taken place at all and prices would have remained unaffected by supply factors, which is a theoretical absurdity. In relation to Asian trade, it will not take long to show the active operation of the law of market areas. Perhaps the most perfect example in our period was the coffee market of Beit el-Fakih and Mocha in the Yemen, where the daily prices of coffee during the trading season were fixed by those prevailing in the intermediate markets of Jedda, Cairo, and Alexandria, and the entire mechanism was compared by a servant of the English Company to the fluctuations in a stock exchange in Europe.[27]

The successful conduct of long-distance trade depends crucially on several interrelated factors, such as transport costs, the temporal pattern of demand and supply, the ability of merchants to hold stocks, price elasticities, and finally, the political or natural hazards to trade. If merchants and traders are not able to establish some sort of equilibrium between and within each of these different variables, trade would be characterized by a random mix of commodities, sudden appearances of excess supply or demand leading to violent price movements, and rapid rise or decline of particular markets. The history of pre-modern world trade contains numerous examples of such disequilibria, but the question which we have to resolve is how far were these conditions the rule. Let us first of all take the problem of transport costs. The means of conveyance, and the associated system of communication, determines the distance scales over which goods are carried for sale, and in addition it also fixes the commodity composition. If transport costs rise monotonically with distance, high-valued goods of course yield higher profits than bulky low-valued commodities. But it would be unjustified to conclude from such a theorization that the pre-modern long-distance trade was composed solely of rich goods. It is important to make a distinction between water and land transport, if we are to understand the economic mechanism which determined the balance of commodities exchanged between different

[26] For a collection of these letters written in 1708, see India Office Records, Miscellaneous Letter Received E/1/1, pt 2, nos 11–19.

[27] India Office Records, Factory Records Egypt and Red Sea, 4 July 1733, vol. 2, no. 324, para 8, p. 253.

regions. There can be little doubt that a high volume of international commerce both in Asia and in Europe was carried in boats and ships. But the technology of shipping required the transport of rich as well as bulk cargoes. The former reduced the fixed overhead costs of transport, while the latter provided essential ballast for the ships and stabilized them during long voyages. No contemporary merchant would have willingly laden his ships with rich commodities alone because of the high risk of shipwreck. The vessels belonging to the European trading companies always carried mixed cargoes and their value was not permitted to exceed a pre-determined limit. That this was the practice followed by Indian merchants also we know from a letter written to the Bombay Council by the Court of Directors in 1759: 'It is clearly our interest to encourage the import of bullion from Mocha to Bombay and as plain that merchants will always divide their risk whenever it is in their power, and if there is but one bottom to freight upon, it follows that silver intended for Bombay may frequently be carried to Surat'.[28] With overland transport, of course, there was no equivalent technological compulsion to combine rich and bulk goods. But the system of travelling in caravans with a large number of wheeled vehicles or pack animals protected by armed guards meant that merchants had to meet a certain amount of fixed costs which could be minimized by varying the composition of goods. Even bulky commodities such as grain, indigo, and coffee were transported on pack animals in large quantities. In the Yemen upwards of 80,000 bales of coffee were moved in one trading season between the inland market and the ports of shipment. The exact costs of camel-hire were available in the English Factory Records from Mocha, and the Court of Directors could easily calculate from these the economics of transport in their coffee trade.[29]

The fact that, in overland caravan trade, goods are moved in small units does not necessarily mean that these are retailed in the same way. The scale of pre-modern Asian trade cannot be taken as fitting into one particular type alone. The number of buyers and sellers and the size of their transactions varied according to the nature of the markets. The evidence compiled by van Leur seems to show that the

[28] India Office Records, Despatches to Bombay, 24 November 1759, vol. 996, para 55, p. 709.

[29] India Office Records, Factory Records Egypt and Red Sea, 20 July 1721, vol. 1, no. 29, paras 13–25, pp. 54–7.

Indian trade to South East Asia in the seventeenth century was conducted by a very large number of individual traders operating on a minute scale. The presence of south Indian Chuliar pedlars in Bantam and their trading methods were noted by the Fort St. George Council in the 1670s.[30] The Dutch copies of Surat or Hugli shipping registers also contain lists of cargo in odd packs and bales, obviously the property of small consigners.[31] As against this evidence, we can easily produce examples of large-scale wholesale dealings undertaken by Indian merchants whose operations extended from Mocha to China. We have already mentioned the family house of Abdul Gafur. In the middle of the eighteenth century, when John Henry Grose visited Surat, he saw stolid Hindu merchants who would singly buy up the entire cargo of a European ship with half an hour's bargaining and prompt cash payments.[32] The English Factory Records from Mocha are quite illuminating on this point. In 1735, for example, out of a total of 42 traders in Beit el-Fakih supplying coffee to the Company there were 5 whose share came to 77 per cent of the quantity. The coffee market of the Yemen was in fact dominated by a group of oligopolistic traders, though there was also a large number of very small sellers.[33]

The existence of a similar market structure for the subcontinent of India can be illustrated in relation to other commodities, pepper, saltpetre, or indigo. The English Council in Surat during the seventeenth century frequently purchased Malabar and Kanara pepper in the town itself, though the practice was disliked by the Company. In 1625, the Company's broker, who was sent to the Deccan to buy pepper, found himself unable to secure any supplies as a result of Virji Vora' offer of a higher price made to the local traders in pepper. The decision to send the broker to the inland markets was secretly made in order to avoid having to deal with Virji Vora in Surat. For the Factory had earlier entered into negotiations with him, and found that he was not only demanding a high price, but had also engrossed all the pepper brought in by the 'Decannee merchants' who were not

[30] India Office Records, Original Correspondence, 23 July-6 August 1676, vol. 37, no. 4215, paras 66–7, p. 11.

[31] As the Dutch records do not indicate ownership of cargo but only that of ships, it is difficult to make any estimate of the size of individual shipments.

[32] John Henry Grose, *A Voyage to the East Indies* (London, 1757), pp. 159–60.

[33] India Office Records, Factory Records Egypt and Red Sea, vol. 2, no. 342, p. 324; no. 348, p. 342; no. 356, p. 361; no. 372, p. 389.

permitted to sell it to anyone else. In the end, Virji Vora's willingness to lower the terms slightly and the fear of Dutch competition—they had recently received large funds from Holland—induced the Council to close with him.[34] In the second half of the century, spot market pepper purchases in Surat were quite common, in spite of the fact that several factories were maintained on the Malabar coast for pepper investments. Later on, during the eighteenth century, the Tellicherry Factory almost always purchased pepper in the local bazars when the season opened, and the prices were fixed by those being offered at the bigger ports such as Calicut.[35] Speculative stock-holding by Indian merchants in anticipation of rising prices was common not only in the pepper trade, but also in that of saltpetre and indigo.

In Bengal, the Court of Directors were continually urging the Calcutta Council not to incur the expense of keeping a separate establishment at Patna for its saltpetre purchases, but to try and obtain the supplies in Hugli. In 1718 Fort William brought up the whole quantity of 10,000 bags which had been imported by the Hugli merchants because the Council had heard that no further supplies were likely to come down that year.[36] However, spot market transactions in saltpetre were generally rare events for the English and the Dutch Companies, and their local servants in Bengal preferred instead to buy in the interior market of Patna, Chapra, and Singhiya. The reason for resorting to the producing market, as given by Alexander Hume, the Chief of the Osten Company from 1726 to 1730, was an interesting one. Saltpetre occupied a vital position in the trading arrangements of the European Companies in the form of ballast cargo for the homeward-bound ships, and without it no return voyage from Bengal was possible for European shipping. As Hume found out from his own experience, unless advance contracts were made for its delivery at the right time, the Hugli merchants with speculative stocks in their hands enjoyed an iron monopoly, and it was in their power to put the success of a voyage at risk.[37] For indigo there were two separate markets, one in Surat

[34] *The English Factories in India 1624–1629*, 10 July 1625, p. 90; 24 September 1625, p. 94.

[35] See, for example, *Records of Fort St. George: Letters from Tellicherry 1733–1734*, 8 April 1734, p. 43.

[36] India Office Records, Bengal Public Consultations, 6 December 1718, vol. 3, p. 606.

[37] Memorie of Alexander Hume, 1730, Stadsarchief Antwerp, General Indische Compagnie (The Ostend Company), 5769.

where it could be brought from intermediate dealers, and the other in the producing districts such as Sarkhej or Biana. From the famous account left by Francisco Pelsaert of the indigo trade at the beginning of the seventeenth century, we can see that prices were determined by both spot market conditions as well as forward dealings. Pelsaert's advice to his masters, the Dutch East India Company, was quite explicit on the method of purchasing indigo. 'When the yield is plentiful . . . one or two experienced men should be sent in the end of August or the beginning of September to Chanowa or the adjoining villages, and should buy whatever is really good; but if the crop promises to be short, it is better to remain quietly in Ghanowa, and buy only from the substantial Hindu or Muslim merchants, who live there and have been many years in the trade, and who have made advances against indigo some months before hand, binding the debtors to sell to no one else. These merchants would rather deal with us at a small profit than with other buyers'.[38] The presence of large dealers helped to stabilize prices, and the contracts made by leading merchants such as Mirza Sadiq and Ghazi Fazil of Biana even acted as price leaders. The export of indigo to the Middle East or Europe was not emphatically organized at the peddling level nor was it completely at the mercy of unpredictable market forces. Traders could and did anticipate price movements. In 1670, for example, Bhimji Parrack advised the Surat Council to make their contracts for indigo with the Agra agent, because they were informed 'by the lately arrived Bussora ship that the esteem and price of said commodity is much risen there, which news will certainly encourage the merchants here to buy up great quantities and then the price will also rise'.[39]

Any observer of the practical aspects of international trade is familiar with the leads and lags which influence the day-to-day movements in the market. But merchants engaged in long-distance trade strive to minimize these disturbing effects through arbitrage operations and stock-holding. Neither of these two remedies can work effectively unless the buyers and sellers have access to fixed locations where the transactions can take place. Peddling trade is geographically mobile, and, from the consumers' point of view, offers little choice because of its discontinuity. On the supply side, if the producers are dependent on the pedlars alone for the off-take of their goods, one must assume

[38] *Jahangir's India: The Remonstrantie of Francisco Pelsaert*, ed. W.H. Moreland and P. Geyl (Cambridge, 1925), p. 16.

[39] India Office Records, Factory Records Surat, 10 May 1670, vol. 3, p. 65.

that either trade is a very marginal activity or that the rhythm of production itself is highly haphazard. The interregional or seaborne trade of Mughal India passed through three different types of spatial markets. If a functional hierarchy is constructed, at the apex would appear the great sea port markets. Surat, Masulipatam, and Hugli, along with Jedda, Mocha, Gombroon, Malacca, Achin, and Canton, can be placed in such a hierarchy. In the second category were the regional or provincial commercial towns which also served as entrepots for a smaller hinterland or area of influence. We can have no difficulty in recognizing these places for India, they were Patna, Benares, Agra, Burhanpur, Lahore, Multan, and many other towns of lesser fame. The third type of market was not located at a particular place or town but was rather a collection of small towns and villages forming a single unit and producing a single export commodity. By way of examples one can name Biana and Sarkhej for indigo, the Chapra district of Bihar for saltpetre, the raw silk producing areas of Kasimbazar, the Dacca district for fine cotton textiles, and so on. There are many functional distinctions which can be drawn between these three basic types of markets in India. The great sea ports are best described as primate nodal markets able to offer a wide variety of services and goods to resident or visiting traders. Once the concentration of skills had grown beyond a certain point, they acted as a magnet for further agglomeration. The initial locational advantage which had probably brought them into prominence also tended to become less important. In Surat goods from all over India, Asia, and even Europe were brought for sale, irrespective of transport costs. The central place functions were performed in the inland markets also, but these were much more sensitive to catchment areas and the configuration of trade routes. The single producing market was of course completely specialized, and the decision of the traders to go there was influenced by the fact that such markets offered considerable price advantages.

Our three-fold division of Indian markets is based on their spatial and functional features. From the point of view of commercial methods and techniques, it is possible to make further generalizations. Every large sea port, the secondary interior towns, and the single-product areas included three types of markets, a purely local market serving the needs of the resident population, a wholesale spot market which supplied both the retail trade, the bazar and interregional commerce, and finally, the latter's offshoot, a wholesale forward market. The price formation in each of these three different markets would be a

separate process, following different degrees of risks and economic motivation. In the bazar, competition among sellers as well as among buyers and sellers would presumably fix the level of prices at which the market would be cleared.[40] The distinguishing mark of bazar transactions is their minute scale and not the nature of their participants. For example, a large proportion of the bazar customers may be final consumers, but they could equally well be pedlars and small middlemen from neighbouring local markets who prefer to use the retail trade of a large town in order to secure a wider choice of goods and keener prices.[41] No European traveller visiting India in the seventeenth century failed to describe the great bazars of Surat, Ahmedabad, Burhanpur, or Lahore. Fryer's account of the crowded cloth market and the peddling stalls of Surat can be supplemented by the description of Ahmedabad left to us by Pietro della Valle. On Shrove Tuesday 1623, della Valle wrote in his diary, 'walking in the morning about the town, I saw a handsome street, strait, long and very broad, full of shops of various Trades: they call it *Bezari Kelan (Bazaar-i-kalan)*, that is, the Great Market, in distinction from others than which this is bigger'.[42]

The determination of prices in the wholesale spot market was a more complicated process than in the retail market. The exact mechanism varied according to the different types of commodities offered for sale, and price fluctuations could take place as a result of both speculative motives as well as a genuine intermixture of supply and demand factors. Some idea of the operation of the wholesale spot market can be gathered from the East India Company's coffee purchases in Surat during the 1670s. The President of the Factory informed the Company in November 1670 that the price of coffee in town had varied unaccountably during the previous four months. It was selling at Rs 22 per maund before the Red Sea fleet returned from Mocha, but with the arrival of new supplies the price had come down to Rs 10–11 and currently it was Rs 12–13.[43] Two years later there

[40] On this point, see C. Geertz, *Peddlers and Princes: Social Change and Economic Modernization in Two Indonesian Towns* (Chicago, 1963).

[41] For a similar motivation on the part of the sellers, see India Office Records, Factory Records Java, 30 January 1671, vol. 4, p. 74.

[42] *The Travels of Pietro della Valle*, I, p. 96.

[43] India Office Records, Surat Factory to the Court of Committees, 20 November 1670, Original Correspondence, vol. 31, no. 3515, p. 16; Factory Records Surat, 9 August 1672, vol. 3, p. 11; ibid., 16 September 1672, vol. 3, p. 16.

was another extended discussion in Council about the state of the coffee trade in Surat and the extent of its interconnection with the markets of the Middle East. The first sign that the very large orders received from the Company (500 bales) were causing some anxiety to the President, came from the consultation held on 9 August when the broker was asked to bring in samples of coffee. There were apparently about 1,000 maunds of last year's coffee left in town which were selling from Rs 8.5 to Rs 9. This was a price lower than usual for many years, particularly at the end of the trading season while the ships were still away in the Red Sea. It was feared that the news from the Yemen might raise the price when the merchants learnt that the actual state of affairs in the coffee market was different from that in India. As the ships began to arrive in port from Mocha towards the end of the month, by a strange coincidence this apprehension turned out to be true. Coffee was particularly dear in Mocha that year and the price had risen to 45 Spanish dollars per bahar 'by reason of the great quantities . . . transported thence to Bussora and other parts of Turkey'.[44] At this price there was little inducement to the Surat merchants to import it, and, out of the total estimated amount of 3,300 maunds brought back, no less than 2,000 were in the hands of a single seller. But the merchant refused to take advantage of the prevailing scarcity, and after 15 days of negotiations over the price the Factory bought the entire amount at Rs 11.22 per maund. The English Council thought that the deal left him with very little profit.[45] One can only surprise what reasons had impelled him to sell. A single seller in possession of nearly two-thirds of the total supplies was obviously in a strong position to bargain. Equally, his risk was much greater than that of merchants holding smaller stocks and prepared to gamble on the prices rising with the arrival of the Europe ships and the opening of the roads up country after the rains. The seventeenth century merchant is known to have attached great importance to quick turnover as it increased the velocity of a limited metallic currency, and in this case it may well have been one of the explanations. But it is also possible that a more complex factor was at work. The Surat merchants trading to the Red Sea made their main profit on the sale of Indian exports and usually remitted the proceeds in bullion and coins. By importing coffee, and selling it at a relatively low profit, the merchants

[44] Ibid.
[45] Ibid.

may have maximized the total sales revenue from the voyage. It was certainly a better alternative than importing money.

From this particular example, and similar instances to be found in the records of the trading companies, it is possible to state that the level of prices in the Indian wholesale spot markets adjusted according to the normal interaction between supply and demand current at the time of the transactions, according to the information available to the buyers and sellers, and the merchants' experience of the past behaviour of the market. However, one of the main instruments for stabilizing prices and reducing the risks associated with spot bargains in commodity markets, is the method of forward dealings at agreed prices. In our period the selling side of a particular Asian commodity was not so concentrated that the suppliers could always influence prices at will. But whatever risk there was for such an occurrence could be minimized through advance contracting. Much has been written about the Indian advance payment system, under which merchants received a down-payment on the signing of a formal contract, and they in turn undertook the prior financing of the producers. A whole nexus of credit relationships permeated Indian economic life and it was an important instrument of social control, in addition to being a source of capital for workmen too poor to provide just more than their own labour. But no one has pointed out that the system was essentially a form of forward dealing. If a willingness to hold inventories is a precondition of the emergence of a spot wholesale market, forward transactions are a means of reducing price fluctuations and the instability of the market arising from a disequilibrium between supply and demand. For the European traders it had the added attraction of ensuring a certain measure of standardization. The Indian system of advance payments has been interpreted by some historians as a kind of European 'putting out' system of production. But this is quite wrong. Merchants who gave advances, seldom did so in raw materials as was customary in Europe, and they were much more interested in contracting for the services of the artisans in order to secure prompt and firm deliveries at agreed prices. The origin of the advance system as it was practised in Mughal India can perhaps be traced to the ideas of Islamic jurisprudence. The law of *sillim* sales, for example, derived its authority from the Koran itself and signified a contract involving a prompt delivery in return for a distant delivery. In the language of the law, it meant a contract for sale, causing an immediate payment of the price, and admitting a delay in the delivery of the wares.

According to Hanifa a *sillim* sale was valid only if, among other conditions, it specified the period of the delivery and the rate of the capital advanced. It is also specifically mentioned in the *Hedaya* that 'articles bespoke from the manufacturer, in a contract of Sillim, are considered as entities . . . and that a contract for workmanship is a sale and not merely a promise'.[46]

Was the institutional character of Asian markets and merchants in the seventeenth and eighteenth centuries very different from their European counterparts? It can be seen, taking the evidence of European sources alone, that the Dutch, the English, and later the French East India Companies traded in Europe and Asia following the same basic commercial methods. They did not bring new techniques to the purchasing markets of Mocha, Gombroon, Surat, Hugli, Bantam, and Canton. They did not, and could not, command the local markets. As Gerard Aungier, the President of the English Factory in Surat, wrote to the Company in 1677, 'We take the due notice of what you advise touching the low price of pepper in Europe and your orders to bring down the price here also; wherein we have not been wanting to use our best endeavours; but without success. For there is so great a consumption of pepper in these countries and so many dealers therein, who transport it to foreign parts, as well that of Deccan as a Malabar, that it is impossible to lower the price to the rates you limit'.[47] Similar instances of the operation of the market mechanism forcing up or down prices in London or Amsterdam can be easily compiled. What is needed at the moment, is a much more careful study than has hitherto been attempted, of the different types and forms of market structure in pre-modern trade classified by functions rather than geographical area.

[46] Charles Hamilton, *The Hedaya or Guide: A Commentary on the Mussulman Laws*, Second Edition (London, 1870), pp. 299, 302, 308.

[47] India Office Records, Surat Factory to the Court of Committees, 22 January 1677, vol. 37, no. 4258, pp. 5–6.

Chapter Nine

Changes in Production and Circulation of Money in Seventeenth and Eighteenth Century India: An Essay on Monetization Before Colonial Occupation

FRANK PERLIN

I. Long-term Contexts

The Task and its Problems

Between the late 16th and early 19th centuries a series of profound changes affected India's monetary history. The first has been well charted and concerns the introduction of a controlled and universal value system within Mughal dominions in the course of the late 16th and early 17th centuries. This formed part of a much broader and longer term movement of increased money-use and piecemeal standardization in different parts of the subcontinent, a development which has so far gained much less attention, but which seems to have been common to other parts of Asia, as well as to the much better-known case of Europe. As for the rest—the history of money from about the last quarter of the 17th century, and especially of the later 18th century—much less is known, assumptions legion, and there is little discussion or research.[1]

[1] The map has been prepared by E. Van Dijk, head cartographer of Erasmus University, whom I thank for expert advice. Full bibliographical references, and the location of my more detailed arguments and interpretations, are given in Part III (bibliographical note).

In what follows, I shall try to interpret the monetary events of the 18th century, treating them as aspects of a broader continuum running from the 16th century to the eve of colonial conquest and embracing the whole subcontinent. Naturally, there were periods of crisis and regression in this long period, regional disparities and areas of marked economic decline, but for the most part we are not in a position to interpret or even identify such reversions and inequalities, and it is arguably a first essential task to draw the outlines of the broader continuity in which, in my view, they formed part.

A major historiographical problem consists of the long established tendency to treat the last pre-colonial centuries in terms of a small number of massive discontinuities, each reversing the trend of previous developments. The first, of course, was the rise and maintenance of Mughal hegemony, the second its collapse, and the third the colonial occupation of the subcontinent which brought the old order to a close. Most major questions of India's economic history are dominated by the brief and brilliant presence of the Mughals, and monetary history is no exception. The centralization and organization of the Mughal state have seemed to make it a grand exception, the byword for an eccentric, but brief case of advance and development, or alternatively standing for developments in the subcontinent at large. As a result, India's neglected century is not the 17th—as it is the case for Europe—but the 18th, the first viewed as the golden age of Mughal power and the second as the period of its dissembling, the condition and prelude to colonial occupation. This 18th century downcycle is apparently reflected in chaotic monetary conditions, the evidence for which lies in a marked fall in quality of fabrication, a weakening of centralized control over minting and currency management, and typological confusion and individualism in mint turn-out. These in turn are parts of a closed circle in which general economic decline seems the natural consequence of the political decentralization and military conflicts of the 18th century. We could say that the ideological spectre that stalks this history is one inherited from the colonial period itself, in which cen- tralization and scale appear synonymous with development and order.

But I shall argue that the 18th century ushers in some of the most interesting changes in India's monetary history, changes bearing close comparison with those affecting other parts of the world during the same period, and partly heralded by earlier developments in the 17th century. In order to present the argument, however, it is essential to

confront a second and most important problem concerning the 17th and 18th centuries: the need to understand and larger monetary sphere of productions and exchanges embracing the whole subcontinent (of which Mughal uniformity formed only part). Once one contextualizes Mughal history, even given the large measure of ignorance that renders this task so difficult and hazardous, the events of the 18th century may be seen to compose a late and vigorous phase of a longer development instead of a negative print of the brilliant tones of the earlier period. It must be added, thirdly, that this treatment of monetary order and change is simply an important part of a more general reinterpretation of late pre-colonial history.

Moreover, the tasks of synthesis and reinterpretation are even more serious than indicated so far. An essential aspect of India's monetary history is the larger international context, especially as concerns supplies of monetary media from overseas, but also, more generally, the overall growth of commercial exchanges and increasing European intervention in Asia. Historians have already argued about the importance of supplies in connection with the much disputed problem of price inflation in Mughal India; however, contextualization is more fundamental, involving a much broader set of influences and changes, associated with the general development of commercial capital itself, thus with a network of interdependent market and production relationships on an international scale. As we shall see, these developments decisively affect monetary relationships in the 18th century.

In contrast, in the early 19th century, the new colonial regime brings the old monetary order to a close, ushers in a severe economic contraction, and imposes a monetary system of the European type. The major monetary transition takes place in the first decades of the 19th century (after the East India Company gains a dominant political position in the subcontinent). In the late 18th century, however, there is a complex period in which indigenous economic developments occur simultaneously with the first phase of economic (and political) subordination in the subcontinent, a movement transcending political and colonial frontiers, but yet to be adequately understood or even described.

In the following sections I shall hazard a schematic view of the broad and long-term changes occurring from the late 16th century onwards in order to provide a sufficient framework for the discussion in Part II of the central problem concerning this paper, the 18th century.

In the 18th century, the questions of monetary unity and fragmentation become especially serious and fascinating issues.

Monetization and its Backgrounds

Although long-term social growth can be observed from at least the 13th century, it is from the 16th century that the signs of change accumulate in a marked manner. These changes affect the size, pace and scope of urban life, commercial transactions, manufactures, population and agrarian settlement. Manufactures, for example, have a long export-oriented history (besides supplying internal markets), but appear in the 17th and 18th centuries to adapt to the changing character of international demand. Thus, this is also the period of the inroads of European maritime traders and trading institutions (the Companies), and of a broader international trading system, into the Asian trading nexus, the implications of both remaining a matter of debate. Most important for our subject, these changes are paralleled by a long process of 'institutional' monetization affecting the all important sphere of agricultural taxation and rents, and influencing most, possibly all of the subcontinent; again these developments have visible beginnings in the 13th century but become especially notable from the late 16th century.

Now, these changes in the form and content of taxation and rents—depending upon a long process of survey and valuation of agricultural lands—form part of a broader set of interdependent changes. On the one hand, alterations in currency organization and production and supply of money match the new demands for money levied upon peasant labour throughout the subcontinent. On the other hand, together with the complexifying of the administrative apparati of tax and rent collection, there develops a nexus of private financial organizations extending over the whole subcontinent and which, by the 18th century, reach into the most remote villages. Production and circulation of money, these financial institutions, trade and agrarian taxation form central parts of a complex set of interdependent relationships about which we have only outline impressions. But putting all these elements together, we may argue that they furnish the infrastructure of demand which, in the course of the next century and a half, on coast and in hinterland, provided relatively high prices for imported monetary media and stimulated vigorous international trading in them.

As for the more limited period of the 18th century, I shall argue

that continued monetization was associated with an increased density of local economic activity and money-use, affecting regions well beyond the more commercialized areas of the subcontinent, such as Bengal and Gujarat. Put briefly, the strictly monetary changes of the 18th century were marked by increased use of money among broad sections of the population, for wages, loans and market exchanges. Correspondingly, monetary management and production became more flexible and responsive to commercial and popular needs (the 'weakening of centralized controls', mentioned above), factoring coins in a manner admirably suited to the major changes in commodity production and marketing occurring during this period. The corollary is that the relationship between political organization and monetary history in late pre-colonial India constitutes a much more problematic question than generally accepted in the historiography.

Regional Differences in Monetary Order and Long-term Trends

Discussion of long-term monetary developments in the last pre-colonial centuries is hindered by three serious problems. The first concerns the scarcity of information on broad and important aspects of monetary history, especially as concerns the Deccan and Southern India (zones 2 and 3 on the map). Secondly, India formed an international arena of contending states in its own right, one in which political frontiers and administrative organizations were highly mobile. Finally, even with respect to monetary organization by itself, different monetary orders are found operating simultaneously in the subcontinent, not necessarily coinciding with political frontiers. The tendency to limit attention to Mughal monetary history (as if it stood for the whole subcontinent) has resulted[2] in a remarkable scarcity of syntheses and long-term treatments.

On a broad and schematic level, the most obvious contrast in monetary organization can be characterized as follows. Generally speaking, north and south constituted zones based respectively on circulation of silver and gold, with the 'intermediate' states of the Deccan gradually shifting in the course of the 17th century from gold to silver. By the start of the 18th century this transition seems almost complete, while in the south, where gold remains an important medium

[2] For example, I. Habib, 'Monetary System and Prices', in the recently published *Cambridge Economic History of India*, vol. 1, typically concentrates on Mughal monetary history in the late 16th and 17th centuries.

of circulation, a mixed trimetallic system takes form later in the same century. This much is well known; but what is the significance of this transition? It is informative to try and reconstruct a more complex and long-term set of developments, of which the shift from gold to silver is a part.

In the Mughal north of the subcontinent, and on the eve of the changes concerning us—that is to say before the 1590s—it was copper which in fact formed the dominant metal used both for minting and as a measure of accounting value (although, of course, silver coin was also minted prior to the '90s). Agricultural taxation was levied in copper dams, while Mughal mints produced a relatively large number of copper coins in these years.[3]

Only in the last years of the 16th century did silver emerge as the dominant currency medium, partly replacing copper in circulation and as a medium of value, and coming to dominate mint output. This change, together with the advance southwards of the Mughal silver-rupee currency system was routed in what seem to have been contingent historical factors: a ready and increasing overseas supply of the metal, Mughal administrative and monetary reforms, and the great period of Mughal military conquest and expansion. However, it is also clear that the advance of silver was accompanied by more fundamental changes of economy and monetary organization.

The dominance of copper lasted longer in the states of the Deccan (intermediary zone 2 on the map), together with gold in denominations found all over peninsula India at this time (zones 2 and 3), the pagoda or hon (and its fraction, the fanum). The latter seems not to have been minted in important quantities in the Deccan itself, although found in circulation and forming a unit of account. In two Deccan states in the 17th century, the Ahmednagar Sultanate and that of the Marathas (roughly contiguous with the western part of Maharashtra, today) agricultural taxation was demanded largely in copper, but also partly in gold hons as well as in kind. Moreover, in Golconda gold seems to have been an increasingly vital medium of commercial transactions. It is likely, in the case of Golconda, that a net trading surplus with the ports and towns of Southern India (where even the East India Com-

[3] These remarks on decline of copper minting are based on I. Habib, 'A System of Trimetallism'; however, the extent of this disappearance of copper from the early 17th century mint seems exaggerated to me, especially when seen from a more than Mughal perspective.

panies established their own mints to produce means of payment for goods purchased in the hinterland), and, in the case of Maharashtra, the flow of booty, tributes and taxation from conquered territories to the south, led to imports of most of the gold coin entering circulation in these regions.

In the south, by contrast, gold formed the basic coining medium, while copper according to one authority, was minted in 'restricted' quantities. The evidence for this qualification is not given but is probably based upon number of finds; while it must be considered debatable the question nevertheless will not effect the following argument.

The question to be focused upon, at this point, is what happens to copper in the long-term all over the subcontinent, irrespective of chronological variations between one region and another. In the course of the later 17th century, copper coin seems to become abundant as a subsidiary to the precious metals, a transformation of function which is of vital significance when interpreted in the light of the broader economic changes discussed above, thus as evidence of a more deep-seated change in the 'sociology' of money-use. Before proceeding to this question we need to look more closely at the major zonal systems themselves. The northern system has been charted in considerable detail by Habib and his students and consists of the establishment in the late 16th and early 17th centuries of a unified currency order throughout Mughal territories. Mughal coins were remarkable for their standard weighting, their high and consistent pure metal content, and their production in a fluctuating number of officially controlled mints spread through the empire. Like all Indian monetary systems it was characterized by what has been called an 'open' or 'free'—access system of minting, in which persons possessing specie or bullion could ostensibly deliver it for minting on payment of factoring costs and seigneurage.[4] All such inputs were coined in this way, without attempts to control the stock of circulating coin. Exchanges between types of coin and monetary medium were allowed to find their own levels in the market. In sum, Indian currencies were not subject to the centrally operated manipulations and instabilities characterizing European systems.

[4] In fact, the question of access is much more complicated, as indicated by the contributions of A. Das Gupta, O. Prakash and this author in J.F. Richards ed., *Imperial Monetary System*. The remarkable purity and reliability of Mughal gold and silver coins was often remarked upon by European travellers.

These last properties also characterized the southern zone, where, nevertheless, currencies were less centralized, being produced by a number of different regimes. Denominations varied in weight and purity, but were essentially of the same general type (notably gold pagodas and fanums), and they may together be thought of as a single set of exchange-adjusted units composing a single, general currency system. The longer perspective in the south, say from the early 16th century on, was also marked by the increasing standardization of types and weights.

Production of Coin in Terms of International Supply of Raw Materials

To what extent were India's currency systems, together with the gradual and overall process of monetization, dependent upon supplies of raw materials from overseas? The actual relationship between quantities of imports and existing stocks is highly obscure, and indeed disputed, but it is possible to show that minting itself was closely linked to supplies from beyond the subcontinent. Major mints were often located in or close to the ports and towns through which monetary media entered the subcontinent. Lahore and Quetta, for example, were situated close to the overland route bringing silver from Persia and the Middle East (a major commercial route in its own right); ports and river towns such as Surat, Rajmahal, Murshidabad and Dacca, and a string of mints around the southern peninsula, are further examples. Moreover, in the 17th century, Surat issues were found widely di-stributed within the heartland of the Mughal Empire in the north.[5] Many other indications could be added (some of which will appear below), not least the high priority set by various authorities on encouraging such imports. Let us look at these monetary materials in turn.

Habib has recently suggested that the bulk of India's 'large influx of gold', in the early modern period, derived from America, West Africa and Japan. To these we can add a variety of other Asian sources, distributed through Malacca, and a major gold producing region in East Africa.[6] It is indeed already apparent in the 16th century that the

[5] Cf. S. Moosvi, 'Money Supply and the Silver Influx', pp. 9, 24.

[6] I. Habib, 'Monetary System and Prices', pp. 367–8; see also H. Kellenbenz, 'Final Remarks: Production and Trade of Gold, Silver, Copper and Lead from 1450–1750', in H. Kellenbenz, ed., *Precious Metals in the Age of Expansion: Papers of the* XIVth International Congress of Historical Sciences, 1981, pp. 312–13.

ports of Southern India provided traders with vigorous markets for Asian and African gold, and that the most of this was minted. Records of the East India Companies in the 17th century, for example, describe the conversion of imported gold into coin, both for internal circulation and as means of payment in the hinterland (the Companies soon establishing their own mints to produce coins of local type, such as pagodas and fanums, for this purpose). On the other hand, copper was exceptional in being mined within the subcontinent, both in Rajasthan and Nepal, important Mughal mints being situated on the routes connecting these mines with the central positions of the Empire (for example, Narnol). Nevertheless, from the early 17th century indigenous copper seems to have been in increasingly short supply, and between the 16th and the end of the 18th centuries, European and Japanese copper becomes one of the structural mainstays of Portuguese, Dutch and English trade in Asia (as well as being one of their most profitable commodities); it is now evident that substantial amounts of the metal were imported into India over this long period and subsequently minted, and these imports seem to have formed the basis for increased copper circulation. Other monetary media, such as silver and cauris, had no Indian sources, other than existing stocks; thus the vast Mughal output of new silver coin that commenced in the 1590s depended almost entirely upon imported Japanese and especially American supplies. The latter came overland upto the middle of the 17th century and also by sea, via the Pacific as well as the Cape of Good Hope.

Finally, there is the question of the non-metallic media, which came to dominate small exchanges in the 17th century. These also derived only from external sources, cauris from the Maldives and badam from Persia, the first exchanged and re-exchanged in the ports of the Indies and Indian Ocean, sold in Indian ports for internal use, and eventually leaking, partly through entrepots in Europe, into the expanding African/Atlantic slave trade where cauris formed an essential means of payment. Thus imports of a variety of media, from diverse overseas sources, formed the raw materials of India's highly monetized economies.

A qualification needs to be made for the much disputed question of hoarding and dehoarding. Indianists have long rightly relegated hoarding from its ubiquitous role as an explain-all for India's substantial and continuous import of precious metals, although it continues to appear in works of a comparative nature, for example in those of

Ardant, Nolte and Wallerstein.[7] However, dehoarding is also cited as a possible source of the raw materials necessary for the conversion to silver in the Mughal Empire, thereby deflating the role of imports. Dehoarding may indeed explain certain short-term aspects of these changes, but the fact remains that we know very little about the actual practice of hoarding in early modern India (it acts simply as an exogenous explanation for awkward problems), its role in monetary economies is disputed (the very term 'hoarding' begs the question of its function), and it is necessary to widen the framework of explanation so that demand for precious metals can be linked to infrastructural aspects of the subcontinental economies themselves. As we have seen, these imports also included humbler monetary media such as copper, cauris and badam (leaving aside more occasional metals such as tin and lead) and these were much less likely to have been stocked in considerable quantities. It is also clear that silver, like copper, generally fetched prices which made their long-distance trade profitable, while imports were encouraged, and sometimes even enforced in certain branches of trade by the Mughal authorities themselves. Moreover, as already mentioned above, such imports were quickly fed into the great coin factories set-up in the major ports and nearby capitals, most notably 17th century Surat (Gujarat) and early 18th century Murshidabad (Bengal).

This broad-based and long-term import of coinage media implicates some central questions about what is taking place in the subcontinent during the period concerned, not least with respect to continuities transcending the political decline of the Mughal Empire. The import of silver has already given rise to a substantial debate on inflation with both its Hamiltonian and populationist phases. This cannot be dealt with in this essay, but it is worth suggesting that a more interesting question concerns the structure of demand that brought these media into the subcontinent, and which surely lies behind the relatively stable and high prices paid for them. In the following sections we shall attempt to link this question to changes in production and factoring of money.

[7] In such cases hoarding seems to serve simply as a demarcation procedure, negating the most interesting external evidence that events in India may be comparable in some way to those elsewhere, and sustaining the old compartmentalizations.

II. Changes in Mint Production and Growth of a Mass Market for Coin

A Problem of Transition

The changing character of 17th century demand is reflected in the differing fortunes of cauris and minted copper, namely in the gradual development of a mass market for money.

In the northern zone, in the early 17th century, copper rapidly, but temporarily declined as a major minting metal, being partly replaced by non-metallic media such as cauris and badam. Cauris were observed by traders as popular exchange media in most parts of the subcontinent, except in the special monetary zone of Gujarat, where another non-metallic medium, badam, circulated. By the end of the 17th century, copper (which by no means disappeared from circulation and which continued to be imported for monetary purposes) again reappeared in substantial quantities as a major monetary metal, but for sub-rupee and sub-pagoda denominations. The reasons for this temporary and partial eclipse probably lay in the high value of copper at the end of the 16th century and in the difficult transition of the mint from production of high quality, crafted coinages to the more flexible factoring of coins suitable for increased commercial and popular consumption. The indications available suggest that imports of non-mintable media expanded considerably during this period. What is especially notable is that cauri and badam circulated in the most commercial and urbanized parts of the subcontinent, as well as in the rural hinterlands, and that later, in the 18th century, when copper had already largely replaced them elsewhere (or, as in Surat, had become the major sub-precious metallic payments medium above baser and non-metallic monies), cauris survived and even grew in importance in what by then had become the most precocious manufacturing region of the subcontinent, Bengal.

As for copper, evidence of increasing consumption of copper for monetary purposes appears towards the end of the 17th century. For example, at the same time that export-oriented textile manufactures grew in importance in coastal Golconda, local merchants undertook contracts for huge purchases of Japanese copper chiefly for minting.[8]

[8] K. Glamann, 'The Dutch East India Companys Trade', p. 66, and *Dutch Asiatic Trade*, p. 177.

Similarly, in the 1670s, the East India Company mint at Bombay commenced production of crudely crafted copper coins, not only for use by its own merchants or for circulation within the port itself, but for sales in the Deccan hinterland and territories to the south, which were then providing profitable markets for copper coin.

The implications of these and many other cases, is that the general expansion of cauri-use, and the partial and temporary disappearance of copper, can be viewed together as complementary symptoms and responses to growing markets for monetary media, to problems of supplying copper in sufficient quantities in the early 17th century to meet the changing structure of demand, and to difficulties in production of coin within the mint (costs of production having to be reduced if copper was to fulfil its role as subsidiary or substitute money). If it can be shown that the relative price of copper declined over the long-term (despite its behaviour on international markets), its increasing use as a payments medium for large numbers of humble producers of crops and textiles in town and countryside, and for urban circulation among the broad mass of urban dwellers, can be explained. In Bengal, in contrast, where prices of foodstuffs and labour were unusually low until late in the 18th century, cauris prevailed as the main subsidiary to silver.

Nevertheless, it is the contrast between the late 16th and late 18th centuries which presents the most interesting and difficult problems with respect to changing money-use and growth of a mass market for coin. A contemporary gazetteer proudly describes the carefully controlled, highly skilled craftsmen of the early Mughal mint. Despite the fundamental reforms of the 1590s, which increased demand and output of silver, techniques of production do not appear to have altered in the decades immediately following. By the late 17th century, however, many of the new copper coins show a marked decline in quality of crafting, and this is also true of silver rupees, though to a more modest extent. East India Company coppers, for example, betray a frequently gimcrack appearance at the same time as Company officials complained about the technical difficulties of producing large numbers of coins at sufficiently low cost for popular usage. Correspondingly, silver coin often lacks the degree of care put into cutting and die design in the earlier period, although retaining reliable silver content. A typical bottleneck factor in the transition of the mint to heightened levels of output lay in the scarcity and cost of skilled personnel. The European trading companies, for example, set up mints to produce

hammered coins of local type (attempts to use machinery in the late 17th century were soon abandoned), but it is notable that personnel were scarce and expensive, while those that were available were often insufficiently skilled, the companies even attempting to import their own specialists, although with indifferent results. These mints were precursors of the low quality coin factories which increasingly came to characterize the 18th century.

In short, decline in crafting formed one of the responses to the growth of a mass market for coin, allowing less skilled personnel to be employed, output to be simplified and increased, and copper to be brought back into production on a large-scale.[9] In Europe's more centrally controlled currency orders the authorities commenced a long and difficult transition to mechanized production, ostensibly for similar reasons.

Results of Transition in The 18th Century

By the 18th century, it is clear that we can no longer treat production of money in terms of the relatively homogeneous and undifferentiated payments media which had earlier characterized the Mughal north but which had unfortunately formed the typological standard of comparison in most of the secondary literature (surely because it most resembles the ideal of European currency systems). The 18th century, long treated in terms of political and economic decline, is better understood in terms of an increasingly complex, differentiated and localized type of economy in which large numbers of urban and rural producers became more involved in money-use. On the one hand, penetration by the European companies took on a new and monopolistic character, and the export-orientation of substantial sectors of both urban and cottage textile manufacturing increased. In addition, however, the inhabitants of relatively remote regions also came to participate to an unprecedented degree in the use of money. Correspondingly, the mint takes on a new, more differentiated character,

[9] Gimcrack production was not of course new, having characterized certain moments of Bahmani and Deccan Sultanate minting much earlier. In the same way, demand clearly outstripped the capacity of supply, quality thereby deteriorating. But these are the results of merely temporary pressures (production of a tribute coinage for example), our arguments concerning a general secular change in the character of demand itself. Temporary deteriorations, due for example to a recoinage, have frequently been observed in the case of Medieval England.

as we shall see below. In central Maharashtra, for example, not known as an important exporting region, wages, sales in the market, accounting systems, rents and taxation, and rural loans, possess a monetary character they either wholly or partly lacked in the 17th century. Even less in the 18th century than in the 17th, can economy, and thus money, be understood in merely regional or sectorial terms (a point to be further confirmed by the discussion of banking below).

In the late 18th century, mints increased in number in commercial and relatively remote regions alike. Malcolm counted nine mints in the small region of Malwa (zone 2), while in Mysore (zone 3) twelve were established in this period. In the Western Deccan (Maharashtra) many new mints were founded in these decades, although the full number remains unknown. Nor do we know how long each operated, nor the various periodicities of their production, but what is certain is that production is better calculated by region than by mint, in contrast to the earlier period in which particular mints frequently had a regional function (see Table 3). In addition, many new mints were established in small market towns as well as in the larger centres; this occurred in regions not necessarily involved in substantial cash cropping and manufacturing for distant markets. Many were founded to produce only copper coins of gimcrack quality while others continued to specialize in the factoring of high quality trading coinages. Using the craft intensive Mughal mint as a typological base, the mint not only becomes differentiated in terms of specialization and craft input, but also in those of the forces behind its day to day management and running. In several parts of the subcontinent, merchants and bankers are often found owning the mint or in managerial control, or else monopolizing access; this is true both of quality trading coinages and of gimcrack coppers.[10] The explanation lies in the adaption of mint production to a variety of different payment functions.

Two can be quickly identified: trading coinages need to be of established reliability over relatively large distances, variations thus confined within strictly narrow limits (and affecting form more than content). Indian Ocean larins and Spanish reals are early examples at the highest levels of international transaction, but the case can also be

[10] The general extent of such control over minting, and the variety of its forms, is unknown, but the cases available suggest that it might have been of strategic importance both in mint production and for the completely obscure problem of supply of raw materials to the mints.

made for the subcontinent itself in the 18th century, when differentiation imposed a special need for reliable coinages. At these higher levels, the same is true of coinages used in the final stages of transmission of agricultural taxation, over which authorities often maintained an understandably tighter control. Below these levels, at that of actual payments of taxation by peasants, say, a host of less pure silver coinages (more variable in weight) were produced which tended to have a restricted local circulation. These probably circulated within the rural market towns and were used for payments and wages to the majority of ordinary people, the better coins reserved for long-distance transfers, for redemption of bills (hundis) and for payments and salaries to those higher on the social scale.

In addition, both agricultural production and manufacturing in India, were increasingly characterized by what is known as advance payments. Even in the 17th century advances played an important role in merchant/producer relationships. Merchants provided producers with the cash to purchase raw materials and foodstuffs (or to pay taxation at difficult times of the year), and received factored commodities, or marketable crops in return at preferential rates. For example, East India Company coinages were explicitly produced, in large part, as direct means of payment for raw cotton and textiles (cauris were imported for the same reason). Advances also need to be differentiated, however, in the late 18th century they take on a less voluntaristic, more coercive character in which low value coinages have a special function. It is very likely that several of the 22/23 mints so far identified in one political unit of Central India, were established precisely for the purpose of producing monies for advance payments. This is especially likely to have been the case with gimcrack coppers, many being produced in small village mints, some of which remain to be identified. The need to pay advances to producers helps to explain why merchants became involved in gimcrack production, especially in regions like Central India where commercial crops and textiles were of major importance.

An exception to this profusion of mints and coin types is Bengal, where, as we have seen, cauris continued to predominate below the rupee, being paid to labourers as wages and to manufacturers. Bengal thus seems to prove the rule; although prices tended to equalize towards the end of the century, we can suggest that here, where the East India Company began to achieve political and economic hegemony, it solved the headache of mint costs, production bottlenecks

and competitive access to limited means of payment by continuing to import non-mintable media.

The reasons for gimcrack production lie in the need to cheapen costs of production and to increase flexibility. This was realized both inside the mint (by altering organization of the production line and the skills required) and also in terms of increasing numbers of mints in operation (which declining factoring standards permitted). Decline in quality of factoring of copper coin is readily observable in the crude, often rectangular cutting, the often very low quality of die design, poor striking and variable alloying.[11] In late 18th century England, we see tendencies of an exactly similar kind, again in response to local cash needs of a largely commercial character, private production (forgeries, clipping and tokens) filling the gaps left by state-run currency orders unresponsive to rapid change.

Some Data on the Transitions

Below, I shall briefly review the tables, which are intended to illustrate the changes discussed above. They present data that have not been collected together before, although a certain number of single cases have been cited in secondary works. The latter have sometimes led to false ideas, particularly in respect of supposed high costs of minting and the rigidity of hand production (contrast, for example, Table 4 with Habib, 'Monetary System and Prices', p. 361). This is why the figures collected in the tables are few in quantity and sometimes difficult to interpret.

Firstly, let us look at Table 1, showing the career of a single, but very important mint, Surat.[12] It is from the 1630s that imports of silver into the port become of special importance, output capacity growing

[11] In view of prevailing treatments, which assume hand-production to be relatively static, it is worth remarking that the career of the Indian mint between the 17th and 18th centuries displayed the flexibility characteristic of industries before industrialization. Premises were convertible to different uses. Production was easily adjusted upwards or downwards by increasing or reducing the number of the workforce or the number of hours worked.

[12] The strategic location of the Surat mint is indicated by Martins contemporary view of Surat as one of the great silver entrepots of the world; whereas Cadiz transmitted its silver to other parts of Europe, that which came to Surat was mostly distributed within the subcontinent, H. Van Santen, *De Verenigde Oost-Indische Compagnie*, pp. 83–4.

rapidly, as shown in the career profile. Figures for the late 17th century are at present unavailable, apart from one doubtful case. Yet this is a period of expansion in silver supply so that one might expect even greater output of coin. In the early 18th century, the port of Surat and the manufacturing economy of its hinterland suffer decline (or a shift to a more peripheral role as producer of exportable crops, embracing some urban decline). But the longer term fortunes of output can perhaps be followed in Table 2 in which several mints in different parts of the subcontinent, and from the start of the 17th century to the early 19th century, are brought together. Such a small number of figures from such diverse types of location are difficult to compare and they require an essay in themselves. Here, we may contrast Surat in the early 17th century with Murshidabad in the early 18th, both mints of central importance in the leading commercial economies of their day (Gujarat and Bengal, respectively). Despite the use of hand technology in both cases, production appears to have increased considerably.

Unfortunately, all of these figures concern silver and gold. Lower standards of fabrication suggest higher production rates in the case of copper, certainly when calculated by region rather than by mint, and this would be expected given the large quantity of copper coin required in circulation. In this respect it is as well to remember that it is not the value of these different products which is of primary concern here but the quantity of items entering circulation.

Now let us look at a more remote rural region at the end of our period (Table 3). Production in Malwa (north central section of zone 2) is relatively small if calculated by individual mint, but overall it is very large indeed, given that a 17th century mint such as Surat supplied a more than regional market (Surat's coins in particular are found widely dispersed in finds in the northern zone). Note that we are again dealing only with silver at a time when copper output in Central India had become very substantial. What marks Malwa (and indeed much of Central India) in the late 18th and early 19th centuries, are urban manufactures of quality textiles for inland markets and raw cotton production for Bengal spinners and weavers, apparently partly financed in the latter case by bankers based in distant cities.

This impression of change over the long-term may also be detected in Table 4. This appears to show a long decline in costs of seigneurage, at least in the north. Two reasons may be suggested: one, possible adaptation by the state authorities to the growing importance

of commerce and commodity production; two, the cut in production costs required to produce marketable coinages under changed conditions (argued above). Although actual costs of manufacture are less commonly recorded than seigneurage,[13] the latter includes certain salaries connected with mint production and could be reduced if output per unit of labour were generally increased. Both responses would have been necessitated by the need to produce viable coinages for mass consumption. Problems of cost must have been central in adapting mints and their products to new usages for large numbers of ordinary, often relatively poor people (especially for the wide-scale return to copper in the north and its expanded use elsewhere—that is to say where costs squeezed against the value of the metal employed), as well as for manufacturing trades subject to increasing competition. In the latter case, prices were increasingly determined internationally and reduction of labour costs likely to have been decisive.[14] Certainly, in Bombay and Madras (as in London and Paris) in the 17th century, mint staff are observed protesting at changes attempted in production methods and salary levels.

The essentially provisional Table 5 shows differences in purity and weight per type of coin and per metal, illustrating our point concerning the variable standards of coins produced for different payment functions. This was intended to confirm my supposition that decline in purity affected certain types of coin rather than others. The silver content of commercial types, intended for interregional payments, varied between much stricter limits than others; by the same token, quality of factoring (cutting and striking) in these cases, settled at a fairly utilitarian level which if no longer 'artistic' was far from the crude productions of other coins.

In short, India's hand-produced coinages were adapted closely to the needs of a complexifying, increasingly differentiated economy, satisfying both local and long-distance needs for circulating coin as they developed in the course of the 17th and 18th centuries. In Europe, on the other hand, the 'alchemist' appeared in the guise of the mundane figure of the illegal coiner and clipper, and the producer of token coins,

[13] See note 20.

[14] Cf. S. Arasaratnam, 'Weavers, Merchants and Company: The Handloom Industry in South-Eastern Indian 1750–1790', in *Indian Econ. and Soc. Hist. Rev.*, 1980, for a discussion of the pressures of international competition on textile production and treatment of producers.

introducing a similar flexibility into systems otherwise characterized by too rigid and centralized management of production.[15]

Banking of the 'Old Type': The Means and Measure of a Larger Unity

A brief word must be given to banking, referred to as such by contemporary European merchants travelling in India, but generally characterized by specialized management of credit networks, money transfers and exchange dealings. The issue is of vital importance for understanding all aspects of the monetary economy, especially as concerns the measure of unity affecting the latter's highly fragmentary appearances and the nature of the changes affecting the 18th century. Unfortunately, it has been seriously neglected, with the result that we only have the barest impressions of its contemporary importance. For example, the widespread appearance and ubiquitous use of bills of payment (hundis) and credit certificates must have affected both circulation and prices, as well as stimulating trade and market-oriented production.

The overall position in the 17th century is unclear. Leonard and Richards have disputed both the scale of banking and its importance for state organization. However, both have important points to make, Leonard attacking the customary substantivist (even essentialist) treatment of bankers, and pointing to their central role in government, administration and economy, and Richards arguing that this is more true of the 18th century than of the 17th. What is well known is that the credit needs of foreign merchants in India, be they Persians, Armenians or European companies, were satisfied through indigenous credit facilities and instruments, centred both in the major ports and cities but also ordered in local agency networks at distant points of production. For example, in the early 17th century Dutch and English indigo traders obtained credit from the North Indian agents of Gujarat based bankers. The same[16] is true of purchases of cotton textiles over large areas of Northern India, and in urban Gujarat. In addition, the largest financiers (at least) appear to have had agents and respondents in different centres of the international nexus of states in the subcontinent and also overseas, for example at Mocha and Bantam. Thus it

[15] Cf. J. Styles, *Our Traitorous Money Makers*, for an excellent description of illegal activities and circulation of the products in 18th century England.

[16] H. Van Santen, *De Verenigde Oost-Indische Compagnie*, e.g., pp. 117–132, is especially useful on the transfer networks.

is difficult to specify what changes in terms of scale had occurred by the late 18th century, when the monopolistic concerns of the Europeans were becoming an important factor in diverting Indian merchant bankers from direct participation in overseas trade in the Indian Ocean and Indies.

In the 18th century, however, it is abundantly clear that financial institutions and mechanisms were a fundamental aspect of the monetary economy, not only increasing the range and number of transactions, and closely linked to the production and use of coin, but providing a facilitative context decisively influencing a wide range of other spheres of late pre-colonial life (for example taxation systems, administration and systems of rights and properties). What needs especial emphasis is the increasing density of transactions involving banking and credit on the local level; this can be seen in commercial regions in the 17th century, but becomes characteristic of more remote and extensive areas, together with monetary transactions more generally, only in the course of the 18th century. Hundis were already important in central commercial regions in the 17th century, such as in Gujarat and the commercialized regions of the north, as well as in places of government, but it is in the 18th century that one reads that even in an economically backward area like Maharashtra, 'most' transfers, even of a highly local kind, were done by hundi. This coincided with the development of a much more monetized economy in the region, remarked upon above. Finally, transactions in coin need to be linked to the myriad small-scale credit letters in cash and kind which affected even the poorest social groups in at least some rural regions.

What I wish to point out, therefore, is that banking provides a different and illuminating perspective to the whole question of coin manufacture and money-use, one which we barely understand as yet, but which permitted a rare level of flexibility, allowed and articulated heterogeneous, but ultimately connected use-functions, and thereby, in turn, fostered the development of a varied coin typology. For the present, the best that we can do is to hold banking and finance in reserve as key factors in the understanding of the larger system.

A System of the European Type

The hypothesis worked out in the above sections is confirmed by the negative events following colonial occupation. However, the essential

changes in the currency system occurred not in the late 18th century, when the East India Company began to build up large territorial bases of political control in the most important commercial regions, but in the early 19th century, when the process of political conquest was fairly complete. It is difficult to be certain about what is happening in the late 18th century: this is the period of great expansion and differentiation in coin production but also, in the last two or so decades, of the beginning of a fundamental change for the worse in India's international position with respect to supplies of monetary media and to commercial relationships with the old inter-Asian trading nexus. In addition, there is an increasing degree of monetary disorder caused by the military and political aspects of colonial conquest. The take over in Bengal and parts of Coromandel in and after the middle of the 18th century, meant a progressive reduction of large-scale imports of bullion and copper in payment for exportable commodities, at the same time that Indian merchants were apparently being excluded from direct participation in overseas trading.[17] Control over a sizeable proportion of agricultural revenue provided the East India Company with an alternative means of payment, stimulating shortages of silver and copper in Northern India.

In addition, the minting activity of the Company changes character, from participation in an indigenous system to increasingly interventionist and hegemonic activities. This reached a climax in the 1820s with the establishment of two huge coin mills at Bombay and Calcutta (imported factories, no less). These provided an order of output-capacity quite different to the handicraft production of pre-colonial India and the early mechanized mints of pre-industrial Europe (Table 2). The establishment of this new level of capacity which reached 300,000 per day at Calcutta was matched by a rapid take over of most indigenous mints in the early decades of the 19th century; these were gradually closed down in the next few years, the last important mints ceasing operations in the 1830s (see Table 6). Before the last phase of closure, the Company proceeded to concentrate production in a few of the old mills, especially those producing coinages used in collection of agricultural taxes. At the same time they took in large quantities of indigenous coin for reminting. Finally, the two new Company mints

[17] However, according to a private communication by O. Prakash, to be published in the near future, this last point, well established in the literature, is in need of substantial revision.

were left as the organs of a centralized currency order of the European type.

Siddiqi has described part of this process in a region of Northern India, where the closure of the Banares and Farrukhabad mints, on which local transactions had come to depend, led to money famine and a decline in the number of local bankers (thus intensifying an earlier crisis). Such money famines also occurred in Maharashtra in these early decades, causing dire, if temporary local dislocation. It is not surprising that Siddiqi also describes the appearance of coin clippers and illegal minting to supply local needs in the former case, nor that a host of copper coins of diverse, often ancient origins appeared in the markets of the early 19th century. Finally, in these same decades, a few of the private mints left in the so-called 'princely states' (territories left under nominally autonomous governments, but in fact highly dependent on the colonial order) seem to have found a profitable business in supplying Company territories with hand-produced coins for popular use, exchanging below the rate of the official,[18] machine produced currencies. Once again, an analogy with late 18th century England is relevant, if this time with a different kind of emphasis.

In a broader view, the early colonial period sees the dismantlement of the currency systems of the old order, as well as much else of the infrastructure of the old economy. From both points of view we can speak of a process of relative demonetization, institutional as well as in terms of the factored materials of exchange.[19]

Conclusion

A final word needs to be said on the context of these changes. Monetization affected a broad spectrum of states in the rest of Asia, as well as Europe itself. For example, the new or expanded use of copper coins was especially widespread. Such internal developments were linked to the great increase in trading activities during this same period. In the long run, an adequate appreciation of the meaning of monetization in any one of these different regions will need to take this broader framework into account.

[18] One example among several consists of the 'shivarai paisa', crudely crafted coppers, pumped out in Satara state in the early 19th century (not the 17th century as commonly believed) and fed into the Pune market then under colonial rule.

[19] See also the reference to A.K. Bagchi in the bibliography on demonetization.

III. Bibliographical Note

The following note replaces detailed footnotes and is directed to the needs of an audience for whom Indian economic history is essentially unknown. It does not pretend to be exhaustive.

The arguments in this essay are based on two more extensively documented essays: 'Money-Use in Late Pre-Colonial India and the International Trade in Currency Media', in: J.F. Richards (ed.), *The Imperial Monetary System of Mughal India* (Delhi, 1987), and 'Proto-Industrialization and Pre-Colonial South Asia', in: *Past and Present*, 98/1983, pp. 30–95.

Complete versions of Tables 1–3, including detailed notes, will be found in the first essay, while those for Tables 4–6 must await later publication.

The formative work on the Mughal monetary system is that of Habib and his students, Hasan and Moosvi, published in a number of articles since the late 1950s. I. Habib gives a summary of their position in 'Monetary System and Prices', in: T. Raychaudhuri and I. Habib (eds.), *Cambridge Economic History of India*, vol. 1, 1982, while S. Moosvi has begun a major revision in 'The Silver Influx, Money Supply, Prices and Revenue-Extraction in Mughal India' *JESHO*, 30/1, 1987. Their findings tend to reflect the vicissitudes of the Hamilton debate in Europe.

The focus of this work is limited, however, being confined essentially to the Mughal monetary system, and neglecting monetary phenomena in the pre-Mughal Deccan of the 17th century and in Southern India. It also neglects developments in the 18th century, while attention tends to be dominated by silver. I. Habib has important points to make about the relative disappearance of copper, however, in the early 17th century, in 'A System of Trimetallism in the Age of Price Revolution —Effects of the Silver Influx on the Mughal Monetary System', also in J.F. Richards (1987). Except for the question of the impact of imports on prices, the international context and its ramifications tend to be neglected (both on the level of price formation and on the broader level discussed above).

With respect to these international questions, recent work on trade is very important for its emphasis on monetary media. K. Glamann is especially useful on copper, 'The Dutch East India Company's Trade in Japanese Copper 1645–1736', in *Scandinavian Econ. Hist. Rev.*, 1/1953, pp. 41–79, and *Dutch-Asiatic Trade 1620–1740*, 1958;

P. Vilar, *A History of Gold and Money*, 1976, is valuable on the international context, although in essence neglecting Asia; K.N. Chaudhuri, *The Trading World of Asia and the English East India Company 1660–1760*, 1978, and O. Prakash, 'Bullion for Goods: International Trade and the Economy of Early 18th Century Bengal', in *Indian Econ. and Soc. Hist. Rev.*, 13/1976, pp. 159–87, give information on the supply of silver and gold. There is little of value on cauris in pre-colonial India, and nothing on badam; here, we need to turn to the valuable work of M. Johnson, 'The Cowrie Currencies of West Africa', in *Journal of African History*, 11/1970, pp. 17–49 and 331–53, and to new work by J. Hogendorn for serious study and information on the international aspects of this currency medium, especially its links with Europe and the Atlantic slave trade; J. Heimann, 'Small Change and Ballast: Cowry Trade and Usage as an Example of Indian Ocean Economic History', in *South Asia*, n.s., 3/1980, pp. 48–69, is a pioneering essay on the Asian aspects of the trade. Finally, my 'Money-Use in Late Pre-Colonial India' brings together the scattered evidence for cauri-and badam-use in India, especially as relates to their function as a commercial payments medium in the 17th century.

Speaking generally, however, the literature on Indian social and economic history has yet to be properly related to this new work on overseas commerce and supplies of monetary media, O. Prakash, being a rare exception. Of major importance, at least for its emphasis on international developments, is the work edited by J.F. Richards, *Precious Metals in the Later Medieval and Early Modern Worlds* (Durham, 1983); J. Brennig's contribution considers the relationship of imports to the 'march' southwards of silver in the 17th century, while Richards in his introductory essay has important points to make about India and China as economic nodes of the early modern Asian world. Finally, I have drawn valuable information on the 17th century from H. Van Santen's study of the activities of the Dutch East India Company in early 17th century India, especially with respect to credit and banking, and commercial cropping and manufactures in the hinterland, *De Verenigde Oost-Indische Compagnie in Gujarat en Hindustan 1620–1660*, 1982; this is another of the rare attempts to combine attention to overseas commerce with hinterland history.

Discussion of the broader context of growth in India, especially as concerns periods of apparent decline in post-Mughal Northern India and post-Vijayanagar Southern India, runs against the grain or generally accepted viewpoints. But see the chapters by G. Hambly and B.

Stein, in T. Raychaudhuri and I. Habib (eds.), for belief but none the less valuable pointers. Stein's questions about monetization in Southern India constitute an agenda for future research on this highly neglected region (they are but questions). Once more, J.F. Richards, 'Mughal State Finance and the Pre-Modern World Economy', in *Comparative Studies in Society and History*, 23/1981, pp. 285–308, should be looked at for an unorthodox hypothesis, favouring increased monetization in the 18th century, broadly comparable to the arguments above. Despite what I have said concerning scarcity of data, it is abundant enough to reject Wallerstein's assertion (*Modern World System*, vol. 2, 1980, pp. 108–9), based on an old article of Sperling and repeated recently by H.H. Nolte, *Review*, 6/1982, pp. 58–9, that imported bullion and specie were absorbed not into circulation but hoarding and jewellery; this is one example among several of arguments which merely confirm the tendency to view India as not part of an international system of dependencies before colonialism.

Data on the 18th century is scattered and incomplete. Much derives from a long tradition of numismatic work, especially with respect to identification of mints and their products. As has been made clear above, this work is uneven, leaving serious gaps in our knowledge, even at this primary level of simple classification. However, J. Lingen and K. Wiggings, *Coins of the Sindhias*, 1978, is a valuable, but all too rare example of an attempt to treat these problems exhaustively on the level of the region. Reports, books and articles produced during the course of colonial rule, from the early 19th century on, provide much information on the early phase of colonial transition, but are also the source of a continuing tradition of misunderstanding about the nature of the monetary system. However, A.K. Bagchi's contribution to the 8th International Congress of Economic History, Budapest, 1982 ('Money and Credit as Areas of Conflict in Colonial India', in the *Reports of Section B6*; and A. Siddiqi, *Agrarian Change in a North Indian State: Uttar Pradesh 1819–1833*, 1973), contradict orthodox opinion on this subject (Bagchi, indeed, complementing the view put forward in this article).

Otherwise, the study of the mint and coin production (both 17th and 18th centuries) has been seriously neglected, at least in so far as its internal organization, production character, and adaptation to changing demand is concerned.[20] Hand technology has seemed to

[20] The structure of mint organization remains obscure, varying in different parts

stand for stagnation, single cases for the whole variety of mints and currency orders over the long period, while we lack even the identity and locations of many mints (as usual, our best information concerns the 17th century Mughal Empire).[21] In addition, if overall estimates of money supply (attempted by Habib and Moosvi, for example) have proved notoriously unsatisfactory for the 17th century Mughals, they have rightly not been attempted for the 18th. Rather, we are concerned with basic features such as the extent and character of monetization itself; thus my 'worm's eye' approach to the subject.

As for the broader economic context of the late 18th century, essential for understanding the observed changes in coin factoring, I use my own work on one pre-colonial backward region in the late 18th century, and draw inspiration from a small number of important articles on the transitional period in Bengal and Coromandel; H. Hossain, 'The Alienation of Weavers: Impact of the Conflict Between the Revenue and Commercial Interests of the East India Company 1750–1800', in *Indian Econ. and Soc. Hist. Rev.*, 16/1979, pp. 323–45; S. Arasaratnam, especially his 'Trade and Political Dominion in South India 1750–1790: Changing British-Indian Relationships', in *Modern Asian Studies*, 13/1979, pp. 19–40; K.M. Mohsin's valuable monograph, *A Bengal District in Transition: Murshidabad 1765–1793*, 1973, and O. Prakash, 'Bullion for Goods'.

The study of the crucial subject of banking and credit is relatively new, the consequent lack of sufficient data undermining our capacity to interpret pre-colonial economy; but pioneering work (almost entirely on the late 18th and early 19th centuries) is underway by G.T. Kulkarni, G.D. Sharma and C. Bayly, largely unpublished as yet (but

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of the subcontinent, over time, and per type of coins produced; the difficulty lies in evidence that mint master and merchant (the person requiring his 'raw material' to be coined) divided responsibilities over different parts of the production line, recorded costs thus not necessarily reflecting complete production costs, while 'seigneurage' is a category whose content varied from case to case.

[21] Identification and classification must surely run hand in hand with adequate understanding of production and use of monies, yet much basic data is frankly unknown (for instance, the identity of numerous mints, their periods of working and types of productions, the range of circulation and type of use of the latter), especially as concerns low quality issues. This is both a consequence and a force behind the interpretations combatted in this essay, for example the 'essentialism' that permits, say, a figure for seigneurage or a description of the workings of a mint, to stand for seigneurage and mint working in the subcontinent at large and over two or more centuries.

see G.T. Kulkarni's 'Banking in the Eighteenth Century: A Case Study of a Poona Banker', in *Artha Vijnana*, 15/1973, pp. 180–200). I Habib has discussed hundis in 'The System of Bills of Exchange (Hundis) in the Mughal Empire', in Indian History Congress, 1972. The debate between K. Leonard and J.F. Richards over the role and development of banking is in *Comparative Studies in Society and History*, 21/1979 and 23/1981, but is concerned with the broadest generalities. Methodology in much of the new work is also a problem, being largely concerned with the careers and activities of individual bankers rather than a reconstruction of the network of relationships, contacts and facilities in which these individuals were involved.

Finally, comparison between India and Europe is rendered especially difficult due to disparities in research interest and a large complex of false assumptions fostered by compartmentalization of European and Indian historiographies. M. Steele's contribution to the volume, on the role of expanding output and credit in the 18th century in increasing money supply, provides intriguing parallels, as does J. Styles remarkable essay on illegal clipping and coin production in the late 18th century England ('Our Traitorous Money Makers: The Yorkshire Coiners and the Law 1760–1783', in J. Brewer and J. Styles (eds.). *An Ungovernable People. The English and Their Law in the Seventeenth and Eighteenth Centuries*, 1980). Production of large numbers of token coins in the early modern period (for example, see *The Times*, 2.3.1982, p. 12) is another indication of the parallel expansion of coin output and cash needs in early modern England and India, despite different organizational contexts. F. Spooner, 'On the Road to Industrial Precision: The Case of Coinage in the Netherlands (1672–1791)', in *Ec. en Soc. Hist. Jaarboek*, 43/1980, pp. 1–18, and J. Craig, *The Mint*, 1953, provide information on the difficulties of the transition to mechanized production in Europe; in contrast to Spooner I see hand technologies and mechanization as both having responded to increased demand, which leads me to the suggestion that the character of control over European currency systems had much to do with the introduction of machinery. Finally, G. Parker and K. Glamann's chapters in the *Fontana Ec. Hist. of Europe: The Sixteenth and Seventeenth Centuries*, 1974 (for example), provide information on the larger European and pan-Asian context of monetization discussed in this essay.

Together with the work on cauri in West Africa, comparison

begins to give way to perception of a wider organization of economic development on an international scale.

TABLES

The following tables are simplified versions of the originals, containing only selected information. The originals (for which see the bibliographical note) are accompanied by detailed notes on sources and on problems of interpreting them. Such sources are diverse, quotations differ in form (output, for example, may be expressed as capacity or actual production, or in terms of a quantity per hour, day, year or series of years—or even in terms of an income as a known percentage of actual output), and the contents of apparently identical types of quotation may be shown to differ more or less considerably (seigneurage, for example). The difficulty lies not simply in present scarcity of data but in the fact that its refinement has yet to be debated in the literature. In Tables 1–3, the essential concern has not been to calculate value of output but productivity in terms of numbers of items (thus metric weights are given only in the original versions); in relatively poor but highly monetized regions in which low value currency media are characteristic, the numbers of items entering circulation are more significant than their value, given the questions with which the present essay is concerned. Finally, the tables should be used in conjunction with the map.

TABLE 1

SURAT MINT OUTPUT

Total output per day in no. silver coins (X thousand)	*Estimated output per 250 day year in no. silver coins (X million)*
1	*2*	*3*
1634	5–9	1.25–2.25
1636	6–8	1.50–2.00
1645	22	5.5
1647	30	7.5

Based upon F. Perlin, 'Money-Use', Table 4. 1.1.

TABLE 2

OUTPUT OF COIN IN DIFFERENT INDIAN MINTS (EXCEPTING SURAT)

Place	*Date*	*No. coins per (10 hour) day (× thousand)*	*No. coins per (250 day) year (× million)*
1	*2*	*3*	*4*
Bagalkot	b. 1822	20	5
Benares	1762–64	12–20	3–5
Chandore	a. 1800	20	5
Indore	b. 1823	11	2.75
Murshidabad	1722	49	12.25
Rajmahal	1676	10	2.5
Sagur	b. 1823	7	1.75
Calcutta (factory with 5 steam engines)	1824	308	77

Based upon F. Perlin, 'Money-Use', Table 4. 1.2.
a. = about; b. = before; calculations to nearest 1000 coins/day.

TABLE 3

A REGIONAL UNIT OF PRODUCTION (CENTRAL INDIA BEFORE 1820)

Mint	*No. coins per day (× thousand)*	*Estimated annual output (250 day) (million)*
1	*2*	*3*
Indore	11	2.75
7 other mints	8–10	2–2.5
total capacity of 8 mints	67–81	16.75

Based upon F. Perlin, 'Money-Use', Table 4. 1–3.
(Malcolm, *Central India*, vol. 2, p. 85).

TABLE 4

SEIGNEURAGE COSTS IN DIFFERENT MINTS
(IN CHRONOLOGICAL ORDER)

Mint	*Date*	*Duty %*
1	*2*	*3*
	The northern zone	
Imperial mint	a. 1595	5.0, 5.8
Rajmahal	1681	3.5
Rajmahal	1692	3.38
Rajmahal	1701	3.38
-place unknown-	1714–15	2.5
Murshidabad	1722–28	2.5
Murshidabad	1735	2.5
Ahmadabad	a. 1750	2.5
Chakan	1792–03	0.55
Pune	1799–17	0.65
Chandore	a. 1800	0.2
Chandore	1820	0.52
Bagalkot	a. 1820	0.5
Indore	a. 1820	1.25
Nagpur	1823	1.0
	The southern zone	
Armagon	1626	(1.5)
Nagapatnam	17th cent.	(0.75
Pulicat	1644–47	0.75
Fort St. George (Madras)	1666–78	0.5

a. = about; given that the transition to silver has been completed by the early 18th century. I include mints of zone 2 in the northern silver zone for purposes of this table.

TABLE 5.1

RUPEE COMPARISONS

Type of rupee	*Value (Farrukhabad rupee = 100)*
1	*2*
Ujain	98.78
Indore	98.6–98.8
Old Ankusi	97.08
Sri Sicca	96.5
Chandore	92.7–95.9
Malharshah	93.5
Bhopal	91.2–92.6
Bhilsa	86.9–88.9
Partabgarh	78.7–82.15

TABLE 5.2

VARIATION BY WEIGHT OF SELECTED COIN TYPES
(LATE 18TH–EARLY 19TH CENTURIES)

Type of coin	*Metal*	*No. of specimens*	*Variations as % mean weight*
1	*2*	*3*	*4*
Ankusi rupee	silver	18	1.98
Chandore rupee	silver	235	7.82
Shivarai paisa	copper	35	39.27

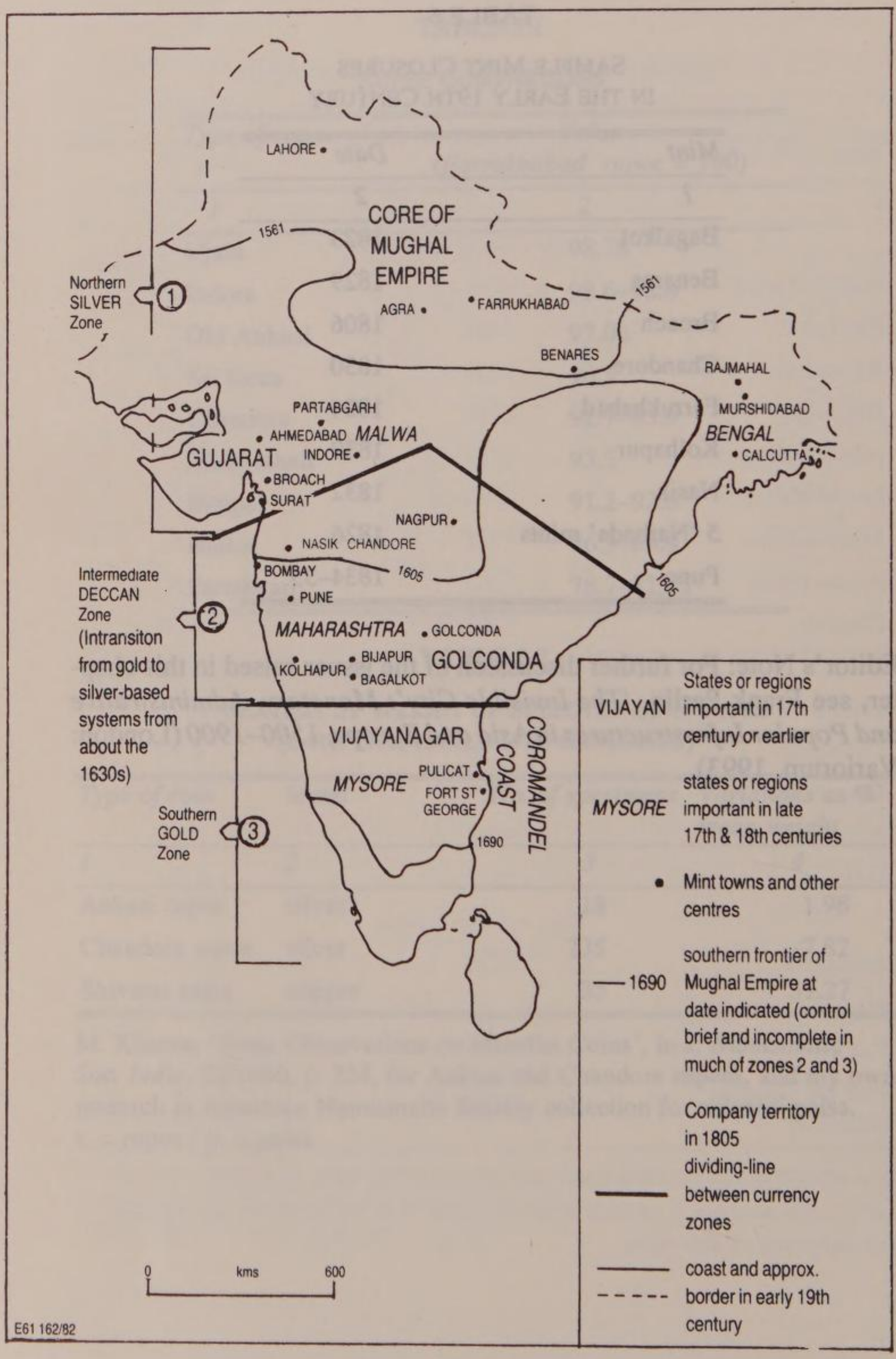
M. Khatun, 'Some Observations on Maratha Coins', in *J. Numismatic Soc. India*, 22/1960, p. 224, for Ankusi and Chandore rupees, and my own research in American Numismatic Society collection for shivarai paisa.
r. = rupee / p. = paisa

TABLE 6

SAMPLE MINT CLOSURES IN THE EARLY 19TH CENTURY

Mint	*Date*
1	*2*
Bagalkot	1823
Benares	1829
Broach	1806
Chandore	1830
Farrukhabad	1824
Kolhapur	1839
Nasik	1832
5 'Narbada' mints	1826
Pune	1834–35

Editor's Note: For further discussion of the issues raised in this chapter, see Frank Perlin, *'The Invisible City': Monetary, Administrative and Popular Infrastructures in Asia and Europe, 1500–1900* (London: Variorum, 1993).


LAHORE
1561
CORE OF MUGHAL EMPIRE
AGRA
FARRUKHABAD
1561
BENARES
RAJMAHAL
MURSHIDABAD
BENGAL
CALCUTTA
Northern SILVER Zone
1
PARTABGARH
AHMEDABAD
MALWA
GUJARAT
INDORE
BROACH
SURAT
NAGPUR
NASIK CHANDORE
BOMBAY
1605
1605
PUNE
Intermediate DECCAN Zone (Intransiton from gold to silver-based systems from about the 1630s)
2
MAHARASHTRA
GOLCONDA
KOLHAPUR
BIJAPUR
BAGALKOT
GOLCONDA
VIJAYANAGAR
COROMANDEL COAST
MYSORE
PULICAT
FORT ST GEORGE
1690
Southern GOLD Zone
3
0
kms
600
E61 162/82
VIJAYAN
States or regions important in 17th century or earlier
MYSORE
states or regions important in late 17th & 18th centuries
•
Mint towns and other centres
—— 1690
southern frontier of Mughal Empire at date indicated (control brief and incomplete in much of zones 2 and 3)
Company territory in 1805
dividing-line between currency zones
coast and approx.
border in early 19th century

Bibliography

Anyone wishing to consult material on money and the market in India over this period would normally begin with Tapan Raychaudhuri and Irfan Habib, eds., *The Cambridge Economic History of India*, vol. I, Cambridge, 1982. This volume contains chapters on the monetary system and prices by Simon Digby and Irfan Habib, and several other chapters with a bearing on the issues dealt with in this volume. However, the *CEHI* is not without its problems—to begin with the fact that the coverage of money and the market focuses almost exclusively on north India. For a set of critiques, see the review symposium in the *Indian Economic and Social History Review*, vol. XXI, (1), 1984, pp. 111–27, by Om Prakash, Harbans Mukhia and S. Arasaratnam; a far wider ranging methodological critique may be found in Frank Perlin, 'Disarticulation of the World: Writing India's Economic History', *Comparative Studies in Society and History*, vol. XXX, 1988, pp. 379– 87, and an attempt to build a synthetic picture in C.A. Bayly, 'State and Economy in India over seven hundred Years', *The Economic History Review*, 2nd Series, vol. XXXVII, (4), 1985, pp. 583–96.

For southern India in the sixteenth and seventeenth centuries, the reader may consult Sanjay Subrahmanyam, *The Political Economy of Commerce: Southern India, 1500–1650*, Cambridge, 1990, as also S. Arasaratnam, *Merchants, Companies and Commerce on the Coromandel Coast, 1650–1740*, Delhi, 1986. For the earlier period, there is also the specialized study by Brajadulal Chattopadhyaya, *Coins and Currency Systems in South India, c.* AD 225–1300, New Delhi, 1977, which deals not only with the far south but also Maharashtra, and R. Nagaswamy work mentioned below.

1. General and Comparative

Karl Polanyi, H.W. Pearson and C.M. Arensberg, eds., *Trade and Market in the Early Empires: Economies in History and Theory*, New Haven, 1957.

One of the central statements of the 'substantivist' position, which argues that marketless trade was the rule prior to the eighteenth century, and that the price-regulated market is a relatively recent phenomenon, historically speaking. The book contains one, rather sketchy, essay on India, by Walter C. Neale.

Max Weber, *General Economic History*, translated Frank H. Knight, New York, 1961. The classic exposition of the emergence of money as part of the history of the rise of capitalism; in particular Chapters 19 and 20 (respectively entitled 'Money and monetary history', and 'Banking and dealings in money in the pre-capitalistic age') are relevant.

Georg Simmel, *The Philosophy of Money*, translated Tom Bottomore and David Frisby, London, 1978. This is a belated translation of *Philosophie des Geldes* (1st edn. 1900; 2nd enlarged edn. 1907) by Simmel (1858–1918), a slightly older contemporary of Weber, whose ideas influenced those of Weber himself on money, besides those of Lukacs and many others. The book's first part (nearer in spirit to Marxist writings) presents ideas on money and value, while the second ('analytical') part develops Simmel's argument on money as an instrument for individual freedom. Much of the work was criticized by Weber and others (besides being rejected outright by the economics profession), and its language is obscure and at times forbidding. Nevertheless, it is of great significance for work on the social history of money.

John Hicks, *A Theory of Economic History*, Oxford, 1969. The well-known Keynesian economist Hicks attempts to explain economic change in the long-term through the idea of the rise of the market. His heroes are thus merchants, who transform earlier Command and Custom Economies into first Mercantile Economies and then Modern Economies. For a witty and perspicacious critique, see Alexander Gerschenkron, 'Mercator Gloriosus', *The Economic History Review*, 2nd Series, vol. XXIV, no. 4, 1971, pp. 653–66.

Jonathan Parry and Maurice Bloch, eds., *Money and the Morality of Exchange*, Cambridge, 1989. A collection of ten articles of high quality, primarily from an anthropological perspective, but of interest to economic historians. The articles on India are by Jonathan Parry and C.J. Fuller, and are both useful—though Parry's discussion is weak on medieval and early modern India. The editors' introduction is an excellent summary and critique of a range of literature.

Arjun Appadurai, ed., *The Social Life of Things: Commodities in a Cultural Perspective*, Cambridge, 1986. A collection of articles, mainly by historians and anthropologists, which is intended to focus on how commodities are embedded in what the editor terms 'the politics of value'.

B.L. Anderson and A.J.H. Latham, eds., *The Market in History*, London, 1986. A collection of essays of mixed quality deriving from a conference,

with many of the better ones dealing with Europe. The essay by Latham on Africa and Asia is of limited utility.

Pierre Vilar, *A History of Gold and Money, 1450–1920*, London, 1976. A useful summation of materials on Europe and the New World by a member of the *Annales* school with neo-Marxist leanings, but relatively poorly informed on Asia, especially India.

J.F. Richards, ed., *Precious Metals in the Later Medieval and Early Modern Worlds*, Durham, 1983. An excellent collection of articles, ranging from Japan, China and Vietnam, to the New World. The articles on India are by John Deyell (reproduced in this volume), Joseph J. Brennig, and the editor Richards. For a review essay, see Frank Perlin, 'Monetary revolution and societal change in late medieval and early modern times', *The Journal of Asian Studies*, vol. XLV, 1986, pp. 1037–49.

E. van Cauwenberghe, ed., *Precious Metals, Coinage, and the Changes of Monetary Structures in Latin-America, Europe and Asia (Late Middle Ages—Early Modern Times)*, Leuven, 1989. A collection of papers from a conference on monetary history.

E. van Cauwenberghe, ed., *Money, Coins and Commerce: Essays in the Monetary History of Asia and Europe (from Antiquity to Modern Times)*, Leuven, 1991. Like the previous volume, a collection of articles from conferences on monetary history (one held in 1987 and the other in 1989). It has several articles by Om Prakash, Frank Perlin, and others, with a bearing on early modern India.

V.M. Godinho, *L'Economie de l'Empire Portugais aux XVe et XVI siècles*, Paris, 1969 (Revised Portuguese version, *Os descobrimentos e a economia mundial*, 2nd edition, 4 volumes, Lisbon, 1981–84). This book traces global economic changes in the fifteenth and sixteenth centuries, and the role of the Portuguese therein, and has had a great impact on the writings of historians like Braudel and Vilar. While extremely rich in (especially Portuguese) data on money and markets in south Asia, and a greatly underrated pioneer work, its main weakness is its somewhat static view of Asia and limited access to materials other than in the Romance languages. An appreciation may be found in M.N. Pearson, 'V.M. Godinho and *Os descobrimentos*', *Indica*, vol. XXI, (1), 1984, pp. 29–38.

Fernand Braudel, *The Structures of Everyday Life*, tr. Siân Reynolds, London, 1981. The first volume of his three-volume work, *Civilization and Capitalism, 15th-18th Century*, of which the second volume, *The Wheels of Commerce*, also contains interesting material. Of utility in this volume is the chapter on 'Money', pp. 436–78.

Huri Islamoğlu-Inan, ed., *The Ottoman Empire and the World-Economy*, Cambridge, 1987. A collection of articles, largely reprinted from elsewhere, touching on issues of commercialization of agriculture, manufac-

turing, trade and markets. The Wallersteinian perspective of the editor is not shared by all the contributors, but all essays are both empirically rich and well focused in terms of issues. The paper by Murat Çizakca should be of particular interest to historians of south Asia.

Peter Spufford, *Money and its Use in Medieval Europe*, Cambridge, 1988. An extremely important and methodologically significant work, whose richness of data is unlikely to be matched by historians of south Asia of the current generation.

Jan Hogendorn and Marion Johnson, *The Shell Money of the Slave Trade*, Cambridge, 1986. A fascinating study of the use of cowrie shells in early modern trade, and the circuits traced between the Indian Ocean, west Africa and Europe.

2. Books on India

W.H. Moreland, *From Akbar to Aurangzeb: An Essay in Indian Economic History*, London, 1923. A classic work, among other things pioneering the systematic use of Dutch sources for a study of Indian economic history, which contains the kernel of Moreland's thesis on the relationship of trade to the agrarian and manufacturing economy and the state. Though now undoubtedly dated in many respects, the book must still be re-read for an understanding of the evolution of the historiography.

A. Appadorai, *Economic Conditions in Southern India (1000 to* AD 1500), 2 volumes, Madras, 1936. An important early work, with a great deal of epigraphic data. However, it fails to achieve a synthesis, and also assumes a somewhat static economy over the five hundred years under study.

Irfan Habib, *The Agrarian System of Mughal India [1556–1707]*, Bombay, 1963. Cast in a Marxist mould, and influenced by Maurice Dobb, this work is a detailed examination of mostly Persian sources to portray the fiscal structure and economic life under the four 'Great Mughals'. It is recognized as a modern classic, but its close relationship to the work of Moreland has been somewhat downplayed in the historiography. One of the controversial points in the book is its insistence that the effects of monetary inflation, resulting from the import of American silver, played a role in destabilizing the Mughal state. A second, revised, edition is reportedly in preparation.

R.S. Sharma, *Indian Feudalism, c. 300–1200*, Calcutta, 1965. A much-cited work, suggesting that the millennium before the establishment of the Delhi Sultanate was characterized by a relatively tradeless and money-starved economy of feudalized, rural, units. The evidence is only partly numismatic, being for the most part inscriptional, and has been much attacked in recent literature. For a review, see Deyell (1990) below.

Hamida Khatoon Naqvi, *Urban Centres and Industries in Upper India, 1556–1803*, Bombay, 1968. An early and useful work on urban economic history, which is still a neglected field where much of India in the period is concerned (in contrast to relatively sophisticated studies on the Ottoman empire, for example). It also deals with production for the market in these centres.

Joseph J. Spengler, *Indian Economic Thought: A Preface to its History*, Durham (North Carolina), 1971. The only treatment of this issue at a book length that is available, and hence important (B.N. Ganguli's book also entitled *Indian Economic Thought*, New Delhi, 1977, deals solely with the nineteenth century). However, it is rather weak on the medieval and early modern periods, being—like most other works—more focused on the ancient (especially Kautalya), and the post-1800 Indian nationalist thinkers.

K.N. Chaudhuri, *The Trading World of Asia and the English East India Company, 1660–1760*, Cambridge, 1978. A mine of useful quantitative information from the archives of the English East India Company, on quantities and prices of goods traded, with some useful descriptive materials on production and market. However, the book is weighed down by a superfluous theoretical apparatus (of econometrics and systems theory), and is at times obscurely written.

Marie H. Martin, *Bahmani Coinage, and Deccani and North Indian Metrological and Monetary Considerations, 1200–1600*, Ph.D. dissertation, University of Michigan, 1980 (University Microfilms, Ann Arbor). The author has published a few articles (such as in Richards, ed., *Imperial Monetary System*, below, on early Mughal coinage) but the thesis—on an important and neglected area—remains unpublished.

H.W. van Santen, *De Verenigde Oost-Indische Compagnie in Gujarat en Hindustan, 1620–1660*, Leiden Ph.D. thesis, 1982 (limited edition). This important and frequently cited thesis, unfortunately unavailable in English, contains data and arguments on prices, money and credit networks in the seventeenth century. There is also a case-study of indigo-production in Bayana, which sheds light on the nature of commercialization in the epoch, and militates against the 'forced commercialization' hypothesis.

J.F. Richards, ed., *The Imperial Monetary System of Mughal India*, Delhi, 1987. An important, if uneven, collection, with articles by Irfan Habib, Om Prakash, Frank Perlin, Stephen Blake and others. Perlin's long paper (of nearly 150 pages) is the widest ranging in its scope, dealing with monetization in early modern south Asia and the international trade in currency media, though its obscurity may daunt some readers.

Satish Chandra, ed., *Essays in Medieval Indian Economic History*, New Delhi, 1987. This is a collection of articles, usually quite brief, reprinted

from the *Proceedings of the Indian History Congress*. Of interest is Section Two, entitled 'Trade, Market and Currency'.

Irfan Habib, *Caste and Money in Indian History*, (D.D. Kosambi Memorial Lectures), Bombay, 1987. A relatively brief re-statement of Habib's well-known positions on these issues (cf. the *Cambridge Economic History of India*, vol. I).

Sanjay Subrahmanyam, ed., *Merchants, Markets and the State in Early Modern India*, Delhi, 1990. This collection deals more with the market than with money. Articles are by Madhavi Bajekal, KumKum Banerjee, Rajat Datta, David Ludden, Stewart Gordon, the editor and others, largely focusing on regional economies.

Sanjay Subrahmanyam, *The Political Economy of Commerce: Southern India*, Cambridge, 1990. This work is mainly based on Dutch, English and Portuguese sources, and argues for close links between the internal economy, short and long-distance trade, and political participation in the period. It contains a review of the theoretical and empirical literature on commercialization and monetization in its concluding chapter ('Models and methodological strategies').

John Deyell, *Living Without Silver: The Monetary History of Early Medieval North India*, Delhi, 1990. This is an extremely important work, although its presentation is at times difficult. It is discussed extensively in the editor's introduction to the present volume; for a detailed review, see B.D. Chattopadhyaya in *Studies in History*, (n.s.), vol. VII, (1), 1991, pp. 168–73.

3. Selected Numismatic Studies

Works that use numismatic evidence but incorporate a broader argument have been dealt with in the earlier section. The studies listed below by date of publication are almost purely numismatic in character.

S. Lane-Poole, *The Coins of the Mughal Emperors of Hindustan in the British Museum*, ed. R.S. Poole, London, 1892.

S.H. Hodivala, *Historical Studies in Mughal Numismatics*, Calcutta, 1923.

H. Nelson Wright, *Coinage and Metrology of the Sultans of Delhi*, Delhi, 1936.

S.K. Maity, *Early Indian Coins and Currency System*, New Delhi, 1970.

R. Nagaswamy, *Tamil Coins: A Study*, Madras, 1981.

John S. Deyell, Nicholas Rhodes and William F. Spengler, *The Standard Guide to South Asian Coins and Paper Money since AD 1556*, Iola (Wisc.), 1981.

K.K. Maheshwari and Kenneth W. Wiggins, *Maratha Mints and Coinage*, Bombay, 1989.

4. Selected Articles

Ward Barrett, 'World Bullion Flows, 1450–1680', in James D. Tracy, ed., *The Rise of Merchant Empires: Long-distance Trade in the Early Modern World, 1350–1750*, Cambridge, 1990, pp. 224–254.

Satish Chandra, 'Some aspects of the growth of a money economy in India during the seventeenth century', *The Indian Economic and Social History Review*, vol. III, (4), 1966.

D.L. Curley, 'Fair grain markets and Mughal famine policy in late eighteenth century Bengal', *Calcutta Historical Journal*, vol. II, 1977, pp. 1–27.

John Day, 'The great bullion famine of the fifteenth century', *Past and Present*, no. 79, 1978, pp. 3–54.

S.P. Gupta and Shireen Moosvi, 'Weighted price and revenue rate indices of eastern Rajasthan (*c.* 1650–1750)', *The Indian Economic and Social History Review*, vol. XII, (2), 1975, pp. 183–93.

S.P. Gupta, 'Prices and rural commerce in 17th century eastern Rajasthan', *Proceedings of the Indian History Congress*, Kurukshetra, 1982, pp. 270–82.

Irfan Habib, 'The Currency System of the Mughal Empire (1556–1707)', *Medieval India Quarterly*, vol. IV, (1/2), 1960.

Irfan Habib, 'Banking in Mughal India', in *Contributions to Indian Economic History*, ed. Tapan Raychaudhuri, Calcutta, 1960.

Irfan Habib, 'Economic History of the Delhi Sultanate—An Essay in Interpretation', *Indian Historical Review*, vol. IV, (2), 1977.

A. Jan Qaisar, 'The role of brokers in medieval India', *Indian Historical Review*, vol. I, (2), 1974, pp. 220–46.

Shireen Moosvi, 'The silver influx, money supply, prices and revenue- extraction in Mughal India', *Journal of the Economic and Social History of the Orient*, vol. XXX, (1), 1987, pp. 47–94.

Brian Murton, 'Towns and Markets in Salem in the Eighteenth Century,' in K.V. Raman, *et al.*, *Srinidhih: Perspectives in Indian Archaeology, Art and Culture*, Madras, 1983.

R.S. Panchamukhi, 'The coinage of the Vijayanagara dynasties', in *Vijayanagara Sexcentenary Commemoration Volume*, Dharwar, 1936, pp. 101–17.

Frank Perlin, 'Proto-industrialisation and pre-colonial south Asia', *Past and Present*, no. 98, 1983, pp. 30–95.

——'Growth of money economy and some questions of transition in late pre-colonial India', *Journal of Peasant Studies*, vol. XI, (3), 1984, pp. 96–107.

Om Prakash, 'Bullion for goods: International trade and the economy of early

18th century Bengal', *The Indian Economic and Social History Review*, vol. XIII, (2), 1976, pp. 159–87.

R.S. Sharma and D.N. Jha, 'The Economic History of India upto AD 1200: Trends and Prospects', *Journal of the Economic and Social History of the Orient*, vol. XVII, (1), 1974.

Sanjay Subrahmanyam, 'Rural industry and commercial agriculture in late seventeenth-century south-eastern India', *Past and Present*, no. 126, 1990, pp. 76–114.

Andrew M. Watson, 'Back to Gold—and Silver', *The Economic History Review*, (n.s.), vol. XX, (1), 1967.

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